ALLEGHENY COUNTY SANITARY AUTHORITY
PITTSBURGH, PENNSYLVANIA

REQUEST FOR PROPOSALS

FOR

BIOSOLIDS MANAGEMENT SERVICES

including

PUBLIC NOTICE

INSTRUCTIONS TO PROPOSERS (Article I)

PROPOSAL FORM (Article II)

SCOPE OF SERVICES (Article III)

and

SERVICE AGREEMENT (Article IV)

June 17, 2026

MEMBERS OF THE BOARD

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Director, Environmental Compliance

ALLEGHENY COUNTY SANITARY AUTHORITY

PITTSBURGH, PENNSYLVANIA

PROPOSAL DOCUMENTS

FOR

REQUEST FOR PROPOSALS

FOR

BIOSOLIDS MANAGEMENT SERVICES

JUNE 17, 2026

APPROVED FOR

ADVERTISEMENT:

Michelle M. Buys

MICHELLE BUYS, P.E.
DIRECTOR, ENVIRONMENTAL COMPLIANCE

ALLEGHENY COUNTY SANITARY AUTHORITY

PUBLIC NOTICE

REQUEST FOR PROPOSALS
FOR
BIOSOLIDS MANAGEMENT SERVICES

1. INTRODUCTION:

The Allegheny County Sanitary Authority (ALCOSAN) is accepting qualifications and Proposals from interested Service Providers who wish to be considered in providing Biosolids Management Services. ALCOSAN intends to award the Services to one (1) Service Provider.

The purpose of this Request for Proposals (RFP) is to define the duties and responsibilities of the Service Provider, to specify the requirements for Proposal submission, and to delineate the selection procedure. Various supporting and informational documents are attached to this RFP. Any future addenda related to this RFP will be emailed to responding Proposers.

A mandatory Pre-Proposal Meeting and Plant Tour will be held Tuesday, June 30, 2026, at 10:00 a.m. (EST). Proposers must pre-register at Procurement@alcosan.org by 1:00 p.m. (EST), Friday, June 26, 2026.

Proposals for providing these Services must be received by ALCOSAN no later than 2:00 p.m. (EST) on Tuesday, August 25, 2026.

ALCOSAN reserves the right to reject any or all Proposals, to waive any informality in any Proposal, and to accept any Proposal should it be deemed in the interest of ALCOSAN to do so.

2. COMMUNICATIONS REGARDING THE REQUEST FOR PROPOSALS:

Questions and requests for clarification regarding this RFP must be directed, in writing, to:

Tawanda Stamps
Director of Procurement
Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233-1092
Email: Procurement@alcosan.org

ALCOSAN cannot guarantee responses to any questions received after 4:00 p.m. (EST) on Tuesday, July 21, 2026.

Proposers shall not contact other ALCOSAN employees regarding this RFP; this may result in their Proposal(s) being rejected. Responses to all general questions and requests for clarification will be posted on ALCOSAN's website. ALCOSAN will provide, in writing, any clarifications, changes, and/or other information deemed to be necessary as addenda to this RFP.

3. PROPOSAL SUBMISSION:

Proposers shall submit Proposal Documents to the following address:

Biosolids Management Services
Allegheny County Sanitary Authority
3300 Preble Avenue
Procurement Office
Pittsburgh, PA 15233
Attention: Tawanda Stamps
Director of Procurement

Proposers shall submit one (1) original, nine (9) hard copies, and one (1) electronic copy (flash drive) of their Proposal Documents. It is the Proposer's responsibility to ensure Proposal Documents have been received. Late submittals will not be considered.

Late and/or noncompliant Proposals will not be accepted for any reason. Proposals that do not include requested information and/or do not follow the requested format will be considered non-responsive. Non-responsive Proposals will not be evaluated. To enable ALCOSAN to efficiently evaluate the Proposals, Proposers must strictly follow the submission requirements in preparing their Proposals.

4. COMMITMENT TO MBE/WBE PARTICIPATION GOALS:

ALCOSAN requires all awarded Proposers to commit to utilizing 10-25% of the contract budget for businesses owned and operated by minorities (MBE) and women (WBE) either as subconsultants, subcontractors, or suppliers if not as prime. The Service Provider shall be required to utilize MBE/WBE enterprises to the fullest extent possible. Proposers shall identify potential subconsultants, subcontractors, or suppliers as team members, if any, and integrate the team members into the Services in a meaningful capacity. ALCOSAN understands that the ability to use subconsultants, subcontractors, or suppliers will vary and depend greatly on the size and type of service. Each Proposer shall describe its commitment to the policy, highlighting MBE/WBE participation rates on the Proposer's past projects. Proposals shall also include Letters of Commitment from each diversity subconsultant, subcontractor, or supplier. For more information, refer to ALCOSAN's Supplier Diversity Business Policy Statement available on the ALCOSAN website.

ALCOSAN does not accept self-certification nor certifications from other agencies who accept self-certification.

Failure to provide a clear MBE/WBE team structure where the team members are integrated into the Services will impact a Proposal's evaluation.

5. RIGHT TO KNOW:

ALCOSAN is a municipal authority and is therefore subject to requests under the Pennsylvania Right-To-Know Law (RTKL). Proposals may become part of a RTKL request during and after the subsequent agreement for Services (Service Agreement). **Each Proposer shall clearly identify only the portion(s) of their Proposal considered company proprietary information and, therefore, exempt from the RTKL.** Any pages marked exempt will not be released should ALCOSAN receive a RTKL request. A legend at the beginning of the Proposal and/or on every page will not be considered sufficient. If the Proposal contains no information that may be exempt from the RTKL, Proposers shall make a statement to that fact in the Proposal. Unless the page is specifically identified, all parts of the Proposal will be subject to a RTKL request.

6. EVALUATION OF PROPOSALS AND SELECTION CRITERIA:

6.1 Project Procurement Team: The evaluation of Proposals will be undertaken on behalf of ALCOSAN by the Project Procurement Team. The objective of the Project Procurement Team is to provide its recommendation of the best qualified Proposer to ALCOSAN's Board of Directors utilizing a transparent, uniform, and objective selection process.

6.2 Interview: Once the deadline for submitting Proposals has lapsed, the Project Procurement Team may schedule formal interviews with each Proposer. Proposers will be notified in writing in advance of their scheduled interview of the interview date and all interview requirements. The interview will generally consist of a presentation by the Proposer regarding its Proposal and a question-and-answer session with the Project Procurement Team. The Project Procurement Team members will consider each Proposer's performance in the interview when scoring the Proposals. ALCOSAN may opt not to conduct interviews.

6.3 Evaluation of Proposals and Selection Criteria: After completion of the interviews, if any, all Proposals will be individually evaluated and scored by each Project Procurement Team member. The Proposals will be scored utilizing the following criteria:

Criteria	Total Points
Responsiveness and Completeness of Proposal Demonstration of clear understanding of the Scope of Services and how the Proposer will accomplish the Services.	15
Qualifications and Experience Overall capabilities of the Proposer to meet the required Services described in this RFP, including, but not limited to, the quality of the Proposer's credentials, experience performing similar services, and qualifications of assigned personnel.	20

Beneficial Use Target/Diversification plus Disposal Capabilities Demonstration of the ability to provide a sustainable, diversified, and reliable biosolids management program that maximizes beneficial use while ensuring adequate backup disposal capacity.	20
Compliance History Demonstrated history of adhering to federal, state, and local regulations, and the ability to proactively prevent, identify, and resolve compliance issues.	20
Pricing & Cost Structure Clarity, completeness, and cost effectiveness of pricing breakdown (unit pricing, beneficial use, disposal), cost adjustments, escalation rates, etc.	15
MBE/WBE Participation The Authority's goal is that 10-25 percent of services be awarded to Minority or Women's Business Enterprises. ALCOSAN will make every effort to meet that goal and encourage that goal among service providers.	10

Based upon the scoring results, the Project Procurement Team will make a recommendation to the Biosolids Committee. The Biosolids Committee will review this recommendation and present it to the Board of Directors for approval. The Board of Directors may then approve the recommended Proposer and authorize ALCOSAN to finalize and execute the Service Agreement with the approved Proposer.

Once the Service Agreement is executed, all other Proposers will be notified of the selection process results.

ALCOSAN reserves the right to reject any or all Proposals, to waive any informality in any Proposal, and to accept any Proposal should it be deemed in the interest of ALCOSAN to do so.

ALLEGHENY COUNTY SANITARY AUTHORITY

Michelle Buys, P.E.
Director of Environmental Compliance

ARTICLE I
INSTRUCTIONS TO PROPOSERS

1.1 **General.** Competitive Proposals for the provision of designated Biosolids Management Services in accordance with the Service Agreement, a copy of which is set forth in Article IV of these Proposal Documents, shall be received at the Office of Procurement, Allegheny County Sanitary Authority, 3300 Preble Avenue, Pittsburgh, PA 15233, until **2:00 p.m. (EST), Tuesday, August 25, 2026**.

Services under the Service Agreement shall commence on January 1, 2027, and shall extend through December 31, 2029. Upon expiration of the Service Agreement, optional extensions are possible as described in Article II, Paragraph B, of the Service Agreement, provided that such extensions are mutually acceptable to the Authority and the Service Provider and in accordance with the conditions of the Service Agreement and the Scope of Services, and at prices agreed upon by the Authority and the Service Provider.

1.2 **Definitions.** Wherever the words defined in this Section or pronouns used in their stead occur in the Proposal Documents (as defined below), they shall have the following meanings:

Addenda - refers to written or graphic instructions issued by the Authority prior to the receipt of Proposals, which clarify, correct, or change the Request for Proposals,

Agreement or **Service Agreement** - means the Service Agreement set forth in Article IV of the Proposal Documents, to be entered into by and between the Authority and the successful Proposer, which sets forth the terms of the agreement between the Authority and the Service Provider pertaining to the Services. It includes the Scope of Services set forth in Article III hereof and Addenda, if any, and any duly executed changes, modifications, and/or amendments to the Service Agreement approved by the Authority and expressly made a part of the Service Agreement.

ALCOSOIL – is the trade name given to the Biosolids produced by the Authority.
Applicable Laws and Regulations – refers to, but is not limited to, all federal, state, and local statutes, regulations, laws, ordinances, guidance, policies, plans, permit conditions, and other requirements pertaining to the transportation, storage, processing, Beneficial Use, disposal, and/or management of Biosolids and Unlimed Solids. This definition expressly includes, but is not limited to, all statutes, regulations, laws, ordinances, guidance, policies, plans, permit conditions, and other requirements of the United States Environmental Protection Agency ("US EPA"), the Pennsylvania Department of Environmental Protection ("PA DEP"), the Ohio Environmental Protection Agency ("OEPA"), and the Occupational Safety and Health Administration ("OSHA").

This term applies to the Applicable Laws and Regulations effective as of the date of these Proposal Documents as well as any subsequent revisions and/or amendments to such Applicable Laws and Regulations.

Authority - or where appropriate in context, **ALCOSAN**, means the Allegheny County Sanitary Authority, 3300 Preble Avenue, Allegheny County, Pittsburgh, Pennsylvania 15233, or any officer or agent duly authorized (in writing) to act for the Authority in the execution of these Proposal Documents and/or the Service Agreement.

Beneficial Use – refers to the use of Biosolids or Unlimed Solids (further processed as described below) from the Authority in a manner that contributes or replaces a product, a raw material, or soil amendment, and does not constitute a waste, including without limitation, using the Biosolids for agricultural and nonagricultural land application (including regional storage for later Beneficial Use), land reclamation (including reclamation activities at active and inactive coal and noncoal mining sites), and forestry (such as tree-trenching), and further processing the Unlimed Solids by digestion followed by Beneficial Use. For purposes of these Proposal Documents, the hauling of Biosolids and/or Unlimed Solids from the Authority for enhancement or upgrading, as the case may be, by digestion, composting, thermal drying, or other processing for subsequent Beneficial Use will be considered by the Authority to constitute Beneficial Use.

Beneficial Use Target - is the aggregate amount of Biosolids to be beneficially used, or Unlimed Solids to be further processed and beneficially used, by the Service Provider during the term of the Service Agreement, measured as a percentage of the total tonnage of Biosolids and Unlimed Solids provided by the Authority during such term. The Proposer must set an aggregate Beneficial Use Target for the term of the Service Agreement in the Proposal Prices section of the Proposal Form included herein as Article II, such aggregate Beneficial Use Target to be comprised, on a combined basis, of the individual Beneficial Use Targets for up to four (4) proposed methods of Beneficial Use. This aggregate Beneficial Use Target will be used to determine any penalty to be assessed on the Service Provider upon expiration of the Service Agreement. Any extension of the Service Agreement will include an aggregate Beneficial Use Target for such extension term.

Biosolids – refers to the treated sewage sludge removed from the wastewater collected at the Plant that meets applicable standards for Beneficial Use in accordance with Applicable Laws and Regulations and applicable Permits. Treatment activities performed by the Authority will be limited to dewatering and liming, as appropriate.

Executive Director or **Director** - means that person holding the position or acting in the capacity of Executive Director of the Authority, acting either directly or through the Director of Environmental Compliance or through properly authorized agents acting within the scope of the particular duties entrusted to them.

Governmental Authority or **Governmental Authorities** – shall have the meaning set forth in Article V, Paragraph E, of the Service Agreement.

Permits – means the current permits/authorizations held by the Authority for the management of Biosolids and Unlimed Solids, including the PA DEP General Permit attached as Appendix C hereto (the "PA General Permit") and the Ohio NPDES "Biosolids Only" Permit attached as Appendix D hereto (the "Ohio NPDES Permit"), any subsequent renewals, and any other permits/authorizations applicable to the management of Biosolids and Unlimed Solids, including any permits/authorizations held by facilities accepting the Biosolids or Unlimed Solids (e.g., digestion facilities, landfills, and agricultural land application and tree-trenching operations). All plans and other documents required to be developed and/or implemented in accordance with any Permits are considered to be included in the term "Permits."

Plant or **Wastewater Treatment Plant** – means the Authority's Wastewater Treatment Plant, located at 3300 Preble Avenue, Pittsburgh, PA 15233.

Proposal - means the completed Proposal Form included herein as Article II, together with the other Proposal Documents, by which the Proposer is to submit or has submitted a Proposal to provide the Services, including any and all supplemental information to be supplied or submitted therewith.

Proposal Documents - means the full and collective set of documents that form the Proposal, including, without limitation: Public Notice; Instructions to Proposers; Proposal Form; Non-Collusion Affidavit; Conflict of Interest Certification; Service Agreement; Performance Bond; Statements of Surety; Scope of Services; Certificate of Minority and Women's Business Enterprise Participation; Proposer's Qualifications Statement; Certification of Safety Procedures Compliance; the Permits; all Addenda issued by the Authority prior to the time of receipt of Proposals, if any; and all supplemental information submitted by the Proposer along with the Proposal. **The Proposer is encouraged to read all Proposal Documents carefully before submitting its Proposal.**

Proposer – means the entity submitting a Proposal in response to the Authority's Request for Proposals to provide the Services.

Service Provider or **Provider** - means the successful Proposer; the Proposer awarded the Service Agreement.

Services - means the services to be furnished by the Service Provider pursuant to the Scope of Services set forth in Article III hereof and the Service Agreement set forth in Article IV hereof.

Unlimed Solids - refers to sewage sludge removed from the wastewater collected at the Plant that has been dewatered by centrifuges but is not limed.

1.3 **<u>Submission of Proposals.</u>** **Proposers must submit all the Proposal Documents** with all the Articles set forth in the Proposal Documents intact, with the Proposal Form in Article II completed, and with all requested supplementary information attached, including one (1) original, nine (9) copies of the complete set, and one (1) electronic copy of the complete set saved to a USB thumb drive, sealed in an envelope and marked **"Proposal for Biosolids Management Services."** Proposals must be delivered by hand or by overnight courier (costs paid by the Proposer) to:

Allegheny County Sanitary Authority
Office of Procurement
3300 Preble Avenue
Pittsburgh, PA 15233-1092
Attention: Tawanda Stamps, Director of Procurement

If the Proposal is hand-delivered, please allow time to process through Plant security. If the Proposal is sent by overnight courier, it is the Proposer's responsibility to verify that the Proposal has been received by ALCOSAN within the time requirement. Late and/or noncompliant Proposals will not be accepted for any reason. A noncompliant Proposal is one that fails to adhere to the requirements of the RFP.

1.4 **<u>Proposal Prices.</u>** Proposal Prices must be set forth on the Proposal Form in Article II, and the Proposal Form, including Proposal Prices, must be completed and submitted by all Proposers. Proposers must submit quotes on the Proposal Form for (A) the price of at least one (1) and no more than four (4) Beneficial Use options, (B) the price for landfill disposal services - pick up at Plant, and (C) the price for landfill disposal services - retrieval from Beneficial Use site (as referenced in item (1)). All prices quoted shall be the price per wet ton for furnishing the Services to the Authority, itemized as described above. Failure to fully complete and submit Proposal Prices on the Proposal Form as described herein and as set forth on the Proposal Form will disqualify the Proposal.

1.5 **<u>Sales Tax.</u>** The prices quoted should in most cases exclude Pennsylvania Sales and Use Taxes and Federal Excise Tax inasmuch as the Authority is exempt from such taxes. The Authority shall furnish exemption certificates where applicable. The Proposer is directed to Article V, Paragraph I, of the Service Agreement for further information. See Attachment A, Pennsylvania (Tax) Exemption Certificate at the end of this Article I.

The Proposer shall be responsible for including in the Proposal Prices all other applicable federal, state, and local taxes, fees, and royalties including any Superfund surcharges assessed for the Services being furnished and equipment used. The Authority will not honor any claim by the Service Provider for not including all applicable taxes, fees, royalties, and surcharges in their Proposal Prices that were in effect at the time of the Proposal.

Taxes, fees, and any other charges enacted after the date of the Proposal shall be a matter for negotiation between the Authority and the Service Provider.

1.6 **Performance Bond.** The successful Proposer, when awarded the Services, shall enter into a written Service Agreement with the Authority, in the form set forth in Article IV, and shall supply the required Performance Bond in the form attached as Exhibit C to the Proposal Form set forth in Article II.

If the Proposer does not enter into such written Service Agreement and does not supply such Performance Bond within ten (10) days (not including Sundays or legal holidays) from the date of the mailing of the Service Agreement to such Proposer at the address given in its Proposal, such defaulting Proposer shall be liable to the Authority for the damages sustained by the Authority by reason of such default.

The Performance Bond shall be duly executed by the Service Provider as principal and by a corporate surety or sureties approved to do business in the Commonwealth of Pennsylvania and must be satisfactory to the Authority. If the surety on the Performance Bond furnished by the Service Provider is declared bankrupt, becomes insolvent, or its right to do business in Pennsylvania is terminated, or is otherwise unacceptable to the Authority, the Service Provider shall within ten (10) working days thereafter substitute another Performance Bond and surety, both of which must be acceptable to the Authority.

Provisions of the Performance Bond shall not limit, in any manner, any liability of the Service Provider to the Authority.

All alterations, extensions of time, extra and additional work, and other changes to the Service Agreement may be made without securing the consent of the surety on the Performance Bond. Such changes shall not, however, alter the surety's responsibility relating to the Performance Bond.

1.7 **Qualifications of Proposer.** All Proposers must be **recognized Biosolids Management Service Providers** with at least five (5) years of Biosolids management experience operating under the same entity name and regularly engaged in the Beneficial Use and disposal options being submitted in the Proposal. The Proposer shall satisfy the Authority that it, together with its subcontractors, has the requisite organization, personnel, capital, plant, equipment, ability, training, certification, licenses, authorizations, permits, and experience to satisfactorily execute the Service Agreement in accordance with its provisions, that the Proposer and its subcontractors are in material compliance with Applicable Laws and Regulations, and that the Proposer and its subcontractors are not subject to any pending or, to its or their knowledge, threatened suits, demands, actions, orders, and/or investigations by any Governmental Authority for violations of Applicable Laws and Regulations, including clean-up or cost recovery claims under federal or state environmental laws, including the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and/or similar state laws.

All Proposers proposing agricultural land application and/or tree-trenching Beneficial Use shall further satisfy the Authority that they have the requisite personnel (employees and/or subcontractors) in adequate numbers and with the appropriate professional experience and training to perform land application and/or tree-trenching of Biosolids at all times in

accordance with the requirements set forth in Article III, Section 15 (Project Personnel). The Proposer and its subcontractors must be authorized to do business in the Commonwealth of Pennsylvania and the State of Ohio and any other State in which the Proposer and its subcontractors operate or propose to operate. The Authority will contract with, and will approve subcontracts with, only firms that have experience in the type of work proposed, and the Proposer shall submit the names, addresses, contacts, and telephone numbers of those clients for which the Proposer has done work of at least 20,000 wet tons per year on the form "Proposer's Qualifications Statement," attached as Exhibit D to the Proposal Form set forth in Article II.

Completion of the Proposer's Qualifications Statement in the Proposal Documents is a mandatory requirement of all Proposers, and failure to complete these Statements accurately and honestly will be grounds for rejection of a Proposal.

All Proposers must demonstrate that they have the sufficient financial strength to undertake the Services and the other obligations under the Service Agreement. To show sufficient financial strength, the Proposer must:

1. Provide a Performance Bond in an amount equal to the estimated compensation for the first twelve (12)-month period of Services, based on an average of 2,500 wet tons per month. The Proposer shall provide an "evidencing letter" from its surety that such a Performance Bond would be forthcoming.

2. Provide the insurance required by the Proposal Documents. The Proposer shall provide an "evidencing letter" from its insurance carrier that such insurance is now in effect and that any necessary increase would be forthcoming.

3. Provide an "evidencing letter" from a financial institution that a letter of credit in the amount of One Million Dollars ($1,000,000) would be produced.

4. Provide an audited financial statement.

5. Provide the Proposer's Dun & Bradstreet D-U-N-S number.

The Authority's decision or judgment on these matters will be final, conclusive, and binding based upon the information provided by the Proposer in the Proposer's Qualifications Statement and any additional investigations that the Authority may undertake. The Authority may undertake such additional investigations as it deems necessary, and the Proposer shall furnish to the Authority all such additional information and data for this purpose as the Authority may request.

1.8 **<u>One Proposal.</u>** Proposers must submit Proposal Prices as set forth on the Proposal Form under one (1) sealed Proposal. Any sealed Proposal that does not include a Proposal Form with completed Proposal Prices will be rejected. If more than one (1) sealed Proposal is offered by any one (1) Proposer in its own name or in the name of its agent, partner, or other person, all Proposals submitted by such Proposer may be rejected.

1.9 **Alterations of Proposal Documents.** Any alteration, erasure, addition, or omission of required information, or any change of the Proposal Documents is done at the risk of the Proposer. Should any Proposer change the wording of the language employed in the Proposal Documents, including the Proposal Form and accompanying documents, so as to alter, modify, or change the language, Scope of Services, Service Agreement, or terms or conditions thereof in any degree or manner, the Authority may, at its sole discretion, reject the Proposal, request that such changes be withdrawn or declared null and void, or accept the Proposal with the changes. The successful Proposer shall be legally bound to comply strictly with the provisions of the Proposal Documents exactly as accepted by the Authority.

In case of a discrepancy or omission or if the Proposer is in doubt as to the meaning of the Proposal Documents such Proposer should at once notify Tawanda Stamps, Director of Procurement, in accordance with Section 1.13 (Questions Regarding Proposal Documents) of this Article I.

1.10 **Acknowledgment of Addenda.** If any Addenda are published for these Proposal Documents, the Proposer shall acknowledge receipt of the Addenda by signing and returning to the Authority the Acknowledgment Form included with the Addenda. **Signed Acknowledgment Forms for any Addenda must be emailed to Procurement @alcosan.org**. Proposers must also acknowledge receipt of Addenda where requested on the Proposal Form. Any Proposal Form received by the Authority that does not show the Proposer's acknowledgment of receipt of Addenda may be rejected by the Authority as being non-responsive.

1.11 **Right to Reject or Accept Proposals.** The Authority reserves the right to reject any or all Proposals or to waive any informality in or to accept any Proposal should it be deemed in the interest of the Authority to do so. The Authority's decision on the qualification of any Proposer or the adequacy, responsiveness, propriety, or timeliness of any Proposal and/or its decision to reject any or all Proposals or to accept any Proposal shall be final, binding, and uncontestable by any Proposer or to any other Proposer.

Any part of the Proposal submitted by the Proposer that is unintelligible, or that exhibits any erasure or other mutilation, or that is not properly signed or otherwise made up, will, at the discretion of the Authority, be considered non-responsive, and the Proposal may be rejected for that reason alone.

The Authority will consider the qualifications and experience of Proposers, as well as subcontractors, suppliers, and other persons and organizations proposed for those portions of the Services for which the identity of subcontractors, suppliers, and other persons and organizations is requested in the Proposal Documents or is disclosed by the Proposer.

1.12 **Withdrawal of Proposals.** Proposals may be withdrawn or modified by written request to the Authority any time prior to the designated time for the receipt of Proposals. The Proposer agrees that it will not withdraw its Proposal after the designated time for the receipt of Proposals without the prior written consent of the Authority, upon presentation of credible

evidence to the Authority within two (2) business days after such designated time of a clerical mistake, as opposed to a judgment mistake, that was actually due to an unintentional and substantial arithmetical error or an unintentional omission of a substantial quantity of work, labor, material, or services made directly in the compilation of the Proposal.

Any written request for modification of a Proposal prior to the designated time for the receipt of Proposals must be over the signature of the Proposer and shall not reveal the Proposal Prices, but shall provide the amount(s) to be added to or subtracted from the Proposal Prices or other modifications to the prices or terms of the Proposal in a manner such that the final prices or terms will not be known to the Authority until the sealed Proposal is opened.

1.13 **Questions Regarding Proposal Documents.** Any information given to Proposers other than by means of the Proposal Documents or by Addenda as described herein is given informally and shall not be used as a basis, in whole or in part, for a claim against the Authority or its employees, contractors, agents, or representatives.

To receive consideration, any question shall be submitted in writing to Tawanda Stamps, Director of Procurement, by 4:00 p.m. (EST) on Tuesday, July 21, 2026.

1.14 **Non-Collusion Affidavit.** The Proposer is required to certify, *inter alia*, that there has been no collusion with any other Proposer or third party in connection with the Proposal, all as more fully set forth in the Non-Collusion Affidavit that is attached as Exhibit A to the Proposal Form set forth in Article II, which must be signed and submitted to the Authority with the Proposal.

1.15 **Conflict of Interest Certification.** The Proposer is required to certify, *inter alia*, that there is no financial interest, personal activity, or relationship involving the Proposer, its owners, affiliates, subsidiaries, officers, directors, or employees that could present a conflict of interest or could impair the Proposer's ability to act impartially and in the best interest of the Authority when performing the Services Agreement, all as more fully set forth in the Conflict of Interest Certification that is attached as Exhibit F to the Proposal Form set forth in Article II, which must be signed and submitted to the Authority with the Proposal.

1.16 **Minority and Women's Business Enterprises and Labor Surplus Area Policy.** It is the policy of the Authority to award a fair share of contracts to Minority and Women's Business Enterprises, all as more fully set forth in Exhibit B to the Proposal Form set forth in Article II. The Proposer is required to complete and submit with its Proposal the Certificate of Minority and Women's Business Enterprise Participation on page 2 of said Exhibit B. **Failure to submit a Certificate of Minority and Women's Business Enterprise Participation and a completed Minority and Women's Business Enterprise Solicitation and Commitment Statement will render any Proposal non-responsive and ineligible for consideration**. Further information concerning Minority and Women's Business Enterprise Participation may be obtained from the Authority.

1.17 **<u>Information to be Furnished with Proposal.</u>** In addition to the Proposal Documents with all forms completed, the Proposer shall submit the supplementary information outlined below along with the Proposal Documents.

- ❑ Detailed list of subjects, or table of contents, for standard operating procedures that will be covered as part of the Project Procedures Manual required in Article III, Section 3.4, Paragraph 19 (Work Plan, Project Procedures Manual, Monthly Meeting).

- ❑ Beneficial Use Work Plans for each Beneficial Use option presented in the Proposal (including, as applicable, further processing followed by Beneficial Use), and each such work plans shall include, but not be limited to, the following:

    - Description of the Services to be provided and how such Services will be provided, specifically mentioning the methods for scheduling and selecting Beneficial Use sites based on typical and emergency quantities as described in Article III, Section 3.4, Paragraph 1 (Quantities) and Paragraph 10 (Beneficial Use Site Operation and Permitting), and any other practices that the Proposer will use to perform the work contemplated in these Proposal Documents, including without limitation detailed plans for any stockpiling or storage of Biosolids or Unlimed Solids prior to Beneficial Use.

    - List of available equipment that the Proposer will use to provide the Services and status of each item of such equipment as owned, leased, or borrowed by the Proposer, or otherwise how it will be made available to the Proposer.

    - Description of the quality assurance and control procedures that will be in place to guarantee problem-free Services, including selection of routes and Beneficial Use sites that avoid sensitive communities, implementing best management practices during transport and Beneficial Use, and procedures to address complaints should they arise.

    - Examples of any forms or reports that track or document compliance with Beneficial Use that would be included in the Daily Reports and Monthly Reports referenced in Article III, Section 3.4, Paragraph 21 (Daily Reports) and Paragraph 22 (Monthly Beneficial Use and Hauling Reports).

    - Sampling, analytical, and testing plans necessary and appropriate for the specific Beneficial Use option referenced in Article II, Section 3.4, Paragraph 13 (Sampling and Analyses) and methods for ensuring compliance with same.

    - Field Storage Plan referenced in Article III, Section 3.4, Paragraph 10 (Beneficial Use Site Operations and Permitting/Additional Considerations for Land Application) for ensuring nuisance odors and nutrient leaching are minimized. The Field Storage Plan may replace the Odor Control Plan if the Field Storage Plan contains all the requested information of the Odor Control Plan from Article III, Section 3.4, Paragraph 27 (Odor Control).

- ❑ Confirmation of ability to comply with the Authority's instructions related to invoice processing and handling, as described in Article III, Section 3.4, Section 3.4, Paragraph 12 (Documenting Tonnage for Invoicing) and Paragraph 23 (Payment).

- ❑ Spill Prevention and Control Plan as requested in Article III, Section 3.4, Paragraph 11 (Spill Prevention, Control and Clean-Up), noting any special conditions if hauling Unlimed Solids.

- ❑ Odor Control Plan as requested in Article III, Section 3.4, Paragraph 27 (Odor Control).

- ❑ Public Outreach strategy that describes how actions specified in Article III, Section 3.4, Paragraph 8 (Educational Outreach) will be fulfilled.

- ❑ Health and Safety Plan, as set forth in Article III, Section 3.4, Paragraph 18 (Health and Safety).

- ❑ Personnel Information as set forth in Article III, Section 3.4, Paragraph 16 (Project Personnel).

- ❑ Disposal Plan for use/disposal (as applicable) of the Biosolids and Unlimed Solids based on typical and emergency quantities as described in Article III, Section 3.4, Paragraph 1 (Quantities) and Paragraph 9 (Disposal/Landfills), should the original method of Beneficial Use not be available for any reason or for material that does not meet Beneficial Use standards due to equipment malfunction at the Authority or any other reason, such plan to include a list of landfills under pending contractual arrangements with the Proposer and to specify each location's capacity per month.

- ❑ Information on subcontractors, processing facilities, tree-trenching operations, and others proposed to participate in the performance of the Services as set forth in Article III, Section 3.4, Paragraph 16 (Project Personnel) and Paragraph 17 (Subcontractors) and as requested in Exhibit D to the Proposal Form set forth in Article II, which information shall include but not be limited to the following:

    - List of all subcontractors, processing facilities, tree-trenching operations, and others proposed to participate in performance of the Services together with contact information (designated representative and telephone number).

    - Confirmation that each proposed participant has the requisite permits, qualified personnel, suitable equipment, and appropriate professional experience and training to perform its respective portion of the Services.

    - List of all outside technical experts (including credentials) with which the Proposer may consult regarding the performance of any portion of the Services.

- Statement that, if awarded the Services, the Proposer shall execute a Service Agreement substantially in the form contained in Article IV, including confirmation of required insurance as set forth therein. If the Proposer takes exception to any terms in the Service Agreement or requests special conditions thereto, these exceptions and special conditions must be listed. Exceptions or other special conditions to the terms of the Service Agreement not listed in the information submitted by the Proposer **will not** be considered by the Authority.

- Copies of current Permits or authorizations, including current Permits held by its subcontractors, processing facilities, tree-trenching operations, and/or intended Beneficial Use sites, as applicable to the portion of the Services to be performed, including without limitation any Permits and/or authorizations associated with the transportation, storage, processing, Beneficial Use, disposal and/or management of Biosolids and Unlimed Solids (e.g., if the Proposer operates, is subcontracting with, or intends to take Biosolids or Unlimed Solids to a composting facility, digester, regional processing site, etc.).

- Evidence of financial strength as listed in Section 1.7 above.

- Promotional items such as commercially printed promotional material, corporate procedures, and photographs of previous projects; provided, however, that submittals should be concise and to the point, and supplementary information must be specific to the Authority's project. Any Proposal with supplementary information that contains general procedures not tailored to the Authority's specific requirements may be rejected.

Upon failure to provide all the supplemental information requested in the Proposal Documents, the Authority may, at its discretion, treat the Proposal as non-responsive and reject the Proposal for this reason alone.

Subject only to court orders or other applicable legal or statutory requirements compelling disclosure of information, including the Pennsylvania Right-to-Know Law, Act of February 14, 2008, P.L. 6, No. 3 (RTKL) discussed below, the Authority will protect the confidentiality of any information that is designated proprietary or as a trade secret. The Authority cannot extend this protection with respect to the regulatory agencies that will have access to such information.

ALCOSAN is a municipal authority and is therefore subject to requests under the RTKL. Proposals may become part of a RTKL requests during and after the subsequent Service Agreement. Each Proposer shall clearly identify only the portions(s) of their Proposal considered company proprietary information and, therefore, exempt from the RTKL. Any pages marked exempt will not be released should the Authority receive a RTKL request. A legend at the beginning of the Proposal and/or on every page will not be considered sufficient. If the Proposal contains no information that may be exempt from the RTKL, Proposers shall make a statement to that fact in the Proposal. Unless the page is specifically identified, all parts of the Proposal will be subject to a RTKL request.

1.18 Time Table for Request for Proposals.

- June 17, 2026 Notice of availability of Proposal Documents
- June 26, 2026 Pre-Registration for Pre-Proposal Meeting by 1:00 p.m.
- June 30, 2026 Mandatory Pre-Proposal Meeting/Plant Tour at 10:00 a.m.
- July 21, 2026 Deadline to submit questions about Proposal Documents by 4:00 p.m.
- August 25, 2026 Deadline to submit Proposals by 2:00 p.m.
- September 2 – 4, 2026 Proposer Interviews (at the Authority's option)
- October 22, 2026 Anticipated award at Authority Board Meeting
- January 1, 2027 Agreement Start Date

1.19 Health, Safety, and Environmental Compliance. The Service Provider, its subcontractors, processing facilities, tree-trenching operations, others performing any portion of the Services, and the sites the Proposer identifies or uses for Beneficial Use (or further processing for Beneficial Use) must comply with all applicable Permits and Applicable Laws and Regulations, including, without limitation, all health, safety, and environmental laws, regulations, and standards. The Proposer shall complete and submit the "Certification of Safety Procedures Compliance" attached as Exhibit E to the Proposal Form set forth in Article II.

1.20 Sexual Harassment Policy. The Service Provider shall see that the Authority's Sexual Harassment Policy is observed. A copy of this Policy is included in Attachment B at the end of this Article I.

1.21 Evaluation Process and Selection Criteria. After receiving and opening all Proposals, the Authority will review and evaluate all the Proposal Documents from each Proposer in accordance with the considerations described below. After Proposal Documents are received and before awarding the Services, the Authority may opt to schedule interviews with each Proposer. The Authority will notify the successful Service Provider as to its preliminary approval for the award of the Services. Final approval will not be effective until the Authority and the successful Service Provider have executed the Service Agreement. All Proposers will be notified of the selection process results.

The Authority will consider the following criteria when evaluating the Proposals:

- Responsiveness and Completeness of Proposal

- Demonstration of clear understanding of the Scope of Services and how the Proposer will accomplish the Services.

- Qualifications and Experience
  - Overall capabilities of the Proposer to perform the Services, including but not limited to the quality of the Proposer's credentials, experience performing similar services, and qualifications of assigned personnel, subcontractors, and others who will participate in performing the Services.

- Beneficial Use Targets/Diversification plus Disposal Capabilities
  - Demonstration of ability to provide a sustainable, diversified, and reliable Biosolids management program that maximizes Beneficial Use while ensuring adequate backup disposal capacity.

- Compliance History
  - Demonstrated history of adhering to federal, state, and local regulations, and the ability to proactively prevent, identify, and resolve compliance issues.

- Pricing and Cost Structure
  - Clarity, completeness, and cost effectiveness of pricing breakdown (unit pricing, Beneficial Use, disposal, cost adjustments, escalation rates, etc.).

- MBE/WBE Participation
  - The Authority's goal is that ten to twenty-five percent (10%-25%) of each project be awarded to Minority and Women's Business Enterprises.

As part of the evaluation of Proposals, the Authority may consider the Proposer's tangible net worth, audited financial statements, and financial concerns, such as insufficient liquidity or excessive leverage, that could give rise to reasonable doubt concerning the Proposer's ability to continue to operate as an ongoing concern. The Authority may also consider whether the Proposer or the Proposer's other projects are subject to any material adverse conditions, such as pending or threatened litigation, notices of violation, or administrative actions. The Authority may consider all submitted materials, not price only, in its evaluation for the award of the Services.

1.22 **Proposers to Investigate.** Proposers are required to submit their Proposals subject to the following express conditions that will apply to and be deemed a part of every Proposal received:

1. Immediately following the Mandatory Pre-Proposal Meeting (see Section 1.18 above), the Authority will provide the Proposers with a tour of the Plant for purposes of preparation and submission of Proposals. Proposers must become familiar with existing Plant conditions and all Applicable Laws and Regulations that may affect the Services.

2. If any discrepancies should be found between existing conditions and the Proposal Documents, prospective Proposers shall report these discrepancies to the Authority for clarification prior to submitting a Proposal. Failure of the Proposer to recognize conditions that affect the Services to be provided shall not be considered sufficient cause for an increase in the Proposal Prices.

3. The submission of a Proposal will constitute an incontrovertible representation of the Proposer that the Proposer has and will comply with every term, condition, and requirement of the Proposal Documents and that the Proposal Documents are sufficient in scope to convey all terms, conditions, and requirements for performing and supplying the Services.

1.23 **Fictitious Name Registration.** When the Proposal is submitted by an individual, individuals, or entity doing business under a fictitious name, there shall be attached to the Proposal a Certificate from the Office of the Secretary of the Commonwealth of Pennsylvania showing that each individual or entity is fully registered under the Fictitious Names Act of the Commonwealth of Pennsylvania 1982, Dec. 16, P.L. 1309, No. 295 Section 2, 54 Pa. C.S.A. Section 301, et. seq.

1.24 **Non-Pennsylvania Entities.** If the Proposer is a non-Pennsylvania corporation, limited partnership, limited liability company, or other form of entity, it shall register as a foreign entity and obtain a Certificate of Authority to do business in the Commonwealth of Pennsylvania, as required by applicable Pennsylvania law.

1.25 **Patents and Proprietary Rights.** Prior to submitting a Proposal, the Proposer shall acquire, through assignment, purchase, license, or other means, all rights required to fully utilize all technology, know-how, trade secrets, inventions, processes, articles, procedures, equipment, apparatus, devices, or any part thereof, and any and all things or matters that are to be used in performing the Services under the terms and conditions of these Proposal Documents and the resulting Service Agreement. Under no circumstances may the Proposer/Service Provider infringe on any patent or any other proprietary rights of third parties in its performance under the terms and conditions of these Proposal Documents or the Service Agreement.

In the event the Authority shall have any reason to believe that any Proposal or performance of the Service Agreement will in any way infringe on any patent or proprietary rights of third parties, the Authority may, at its sole discretion, reject any such Proposal or take such other measures that it deems to be in the best interest of the Authority (including requiring the Proposer to post security). The Proposer will defend, indemnify, and save harmless the Authority, and all persons acting for or on behalf of the Authority, from all claims and liability of any nature or kind, including costs and expenses, arising from or occasioned by any infringement or alleged infringement of patent or proprietary rights on any technology, know-how, trade secret, invention, process, article, procedure, equipment, apparatus, device, or any part thereof, to be utilized by the Proposer, or arising from or occasioned by the use or manufacture thereof, including their use by the Authority, in accordance with Article IX of the Service Agreement. The Service Provider and its subcontractors shall

require their insurance carriers, with respect to all insurance policies, to waive all rights of subrogation against the Authority and all persons acting for or on behalf of the Authority.

In case a temporary, preliminary, or permanent injunction is secured because of an alleged patent or proprietary rights infringement that prevents the Service Provider from providing Services and/or from removing the Authority's Biosolids and Unlimed Solids from the Plant in a timely manner, the Service Provider shall, at its own expense: (1) procure the right to use the same process, materials, or equipment; (2) modify the process, materials, or equipment; (3) provide a replacement process, materials, or equipment that is non-infringing, it being understood that such modification must meet the approval of the Authority; and/or (4) be subject to the Authority taking its Performance Bond to cover the cost of removing/using/disposing the Biosolids and Unlimed Solids by some other means.

1.26 **Timeliness of Services.** Submittal of a Proposal constitutes a representation by the Proposer that all necessary equipment, materials, permits, authorizations, and trained personnel will be available for the timely start and execution of the Service Agreement. The awarded Proposer/Service Provider is responsible for making sure that the progress of the Services is orderly and timely.

1.27 **Separate Contracts.** The Service Provider acknowledges that the Authority may award to other service providers separate agreements to provide Services for various other amounts of the Authority's Biosolids and Unlimed Solids. The Service Provider shall cooperate fully with the Authority in coordinating delivery of Biosolids and Unlimed Solids to all service providers, and to enable the Authority's other service providers to pursue and complete their work on behalf of the Authority.

1.28 **Titles Not to Limit Text.** The titles or headings of the various Articles and subparts thereof are for convenience of reference only and are not intended to limit, and shall not be construed as in any way limiting, the application of text.

1.29 **Insurance.** The terms, conditions, and provisions related to insurance are contained in Article III, Scope of Services. It shall be the responsibility of the Service Provider to make certain that its subcontractors and suppliers comply with any such insurance requirements relating to them.

1.30 **Permission to Sublet or Assign.** The Service Agreement may not be assigned by the Service Provider, nor may any obligation of the Service Provider hereunder be assumed by any other person or third party, without the prior written consent of the Authority and concurrence by the surety. The Service Provider shall be required to present a request for such an assignment and/or assumption to the Authority, in writing, for consideration and approval, and the assignment and/or assumption shall be consummated only upon receipt of the written approval of the Authority. In the case of the Authority's approval, the Service Provider shall file copies of all related legal documents with the Authority. The Service Provider may perform portions of this Service Agreement through any of its subsidiaries, affiliates, subcontractors, or licensees, provided, however, that the Authority will

administer this Service Agreement solely through the Service Provider and will not deal directly with any subsidiary, affiliate, subcontractor, or licensee.

1.31 **Intoxicating Liquors, Controlled Substances, or Similar Acting Drugs.** The Service Provider shall not sell or permit or suffer the introduction or use of intoxicating liquors, controlled substances (without benefit of prescription), or other similar-acting drugs on or about the workplace. The Service Provider and its subcontractors shall implement, maintain, and document a controlled substance surveillance program for all on-site personnel.

1.32 **Rights and Duties of the Authority.** The Authority and its agents shall be the sole judge of the intent and meaning of the Proposal Documents, and its or their decisions thereon, and its or their interpretations thereof, will be final, conclusive, and binding on all parties.

The Authority will appoint representatives during the life of the Service Agreement to observe the Services being provided. Any such representative will have the authority to act on behalf of the Authority to the extent expressly provided in the Service Agreement or otherwise in writing signed by the Executive Director; to stop the Services whenever such stoppage may be necessary, in its sole discretion, to prevent improper execution of the Services, or otherwise to protect the Authority's interests; to approve and direct the Services and to direct that changes be made where, in its sole discretion, public necessity or welfare, the interest of the Authority, or the progress of the Services will require; such approval or direction will, however, in no way relieve or diminish the responsibility of the Service Provider for or in the performance of the Services.

Any delay, failure, or omission of the Authority to exercise any obligations or powers shall not impair any such obligations or powers, nor shall the same be construed to be a waiver thereof or any acquiescence therein, nor shall any such action or inaction by the Authority alter or impair the obligations of the Service Provider to the Authority.

The Authority shall not, unless specifically required by the Service Agreement, supervise, direct, or have control or authority over, or be responsible for the Service Provider's means, methods, techniques, sequences, or procedures of work or the safety precautions and programs incident thereto, or for any failure of the Service Provider to comply with applicable Permits or Applicable Laws and Regulations relating to the Services provided. The Authority shall not be responsible for the Service Provider's failure to perform the Services in accordance with the Service Agreement, applicable Permits, or Applicable Laws and Regulations.

1.33 **Coordination of Services.** The Authority and the Service Provider shall have an initial meeting before the Service Provider begins work to discuss start-up and coordinate activities. Regular meetings shall be held weekly at a minimum to discuss the progress of the Services and any issues or problems that occurred and to plan upcoming work items.

ATTACHMENT A TO INSTRUCTIONS TO PROPOSERS

PENNSYLVANIA (TAX) EXEMPTION CERTIFICATE

[See Attached]

REV-1220 (TR) 07-23 (FI)

START

pennsylvania
DEPARTMENT OF REVENUE

PENNSYLVANIA EXEMPTION CERTIFICATE

- ☐ STATE AND LOCAL SALES AND USE TAX
- ☐ STATE 6% AND LOCAL 1% HOTEL OCCUPANCY TAX
- ☐ PUBLIC TRANSPORTATION ASSISTANCE TAXES AND FEES (PTA)
- ☐ VEHICLE RENTAL TAX (VRT)
- ☐ *ADDITIONAL LOCAL, CITY, COUNTY HOTEL TAX* *

This form cannot be used to obtain a Sales Tax License ID, PTA License ID or Exempt Status.

(Please Print or Type)

Read Instructions On Reverse Carefully

THIS FORM MAY BE PHOTOCOPIED – VOID UNLESS COMPLETE INFORMATION IS SUPPLIED

CHECK ONE: ☐ **PENNSYLVANIA TAX UNIT EXEMPTION CERTIFICATE** (USE FOR ONE TRANSACTION)
☐ **PENNSYLVANIA TAX BLANKET EXEMPTION CERTIFICATE** (USE FOR MULTIPLE TRANSACTIONS)

Name of Seller, Vendor or Lessor			
Street	City	State	ZIP Code

NOTE: Do not use this form for claiming an exemption on the registration of a vehicle. To claim an exemption from tax for a motor vehicle, trailer, semi-trailer or tractor with the PA Department of Transportation, Bureau of Motor Vehicles, use one of the following forms:

FORM MV-1, Application for Certificate of Title (first-time registrations)

FORM MV-4ST, Vehicle Sales and Use Tax Return/Application for Registration (other registrations)

Property and services purchased or leased using this certificate **are exempt** from tax because: (Select the appropriate paragraph from the back of this form, check the corresponding block below and insert information requested).

☐ 1. Property or services will be used directly and predominately by purchaser in performing purchaser's operation of: _____

☐ 2. Purchaser is a/an: _____ holding Sales Tax Exemption Number _____

☐ 3. Property will be resold under License ID _____ (If purchaser does not have a PA Sales Tax License ID, include a statement under Number 8 explaining why a number is not required).

☐ 4. Property or services will be used directly and predominately by purchaser performing a public utility service.
☐ PA Public Utility Commission PUC Number _____ and/or ☐ U.S. Department of Transportation MC/MX _____

☐ 5. Exempt wrapping supplies, License ID _____ (If purchaser does not have a PA Sales Tax License ID, include a statement under Number 8 explaining why a number is not required).

☐ 6. Canned computer software purchased by a financial institution subject to the Bank and Trust Company Shares Tax (Article VII) or the Mutual Thrift Institutions Tax (Article XV).

☐ 7. Canned computer software licenses that are billed to a PA address but used outside of PA. The total number of software licenses purchased for invoice # _____ is _____. The total number of users accessing and using the software outside PA is _____.

☐ 8. Other _____
(Explain in detail. Additional space on reverse side).

I am authorized to execute this certificate and claim this exemption. Misuse of this certificate by seller, lessor, buyer, lessee or their representative is punishable by fine and imprisonment.

Name of Purchaser or Lessee	Signature **Please sign after printing.**	EIN	Date
Street	City	State	ZIP Code

1. **ACCEPTANCE AND VALIDITY:**
For this certificate to be valid, the seller/lessor shall exercise good faith in accepting this certificate, which includes: (1) the certificate shall be completed properly; (2) the certificate shall be in the seller/lessor's possession within 60 days from the date of sale/lease; (3) the certificate does not contain information which is knowingly false; and (4) the property or service is consistent with the exemption to which the customer is entitled. For more information, refer to Exemption Certificates, Title 61 PA Code §32.2. An invalid certificate may subject the seller/lessor to the tax.
2. **REPRODUCTION OF FORM:**
This form may be reproduced but shall contain the same information as appears on this form.
3. **RETENTION:**
The seller or lessor must retain this certificate for at least four years from the date of the exempt sale to which the certificate applies.
⚠ **IMPORTANT: DO NOT RETURN THIS FORM TO THE PA DEPARTMENT OF REVENUE.**
4. **NONPROFIT EXEMPT ORGANIZATIONS:**
This form may be used in conjunction with form REV-1715, Exempt Organization Declaration of Sales Tax Exemption, when a purchase of $200 or more is made by an organization which is registered with the PA Department of Revenue as an exempt organization. These organizations are assigned an exemption number, beginning with the two digits 75 (example: 75000000).

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GENERAL INSTRUCTIONS

Those purchasers set forth below may use this form in connection with the claim for exemption for the following taxes:

a. State and local sales and use tax;

b. PTA rental fee or tax on leases of motor vehicles;

c. Hotel occupancy tax (state 6%, Philadelphia 1%, Allegheny 1%) if referenced with the symbol (●);

d. PTA fee on the purchase of tires if referenced with the symbol (+);

e. Vehicle rental tax (VRT).

EXEMPTION REASONS

1.) Property and/or services will be used directly and predominately by purchaser in performing purchaser's operation of:

A. Manufacturing

B. Mining

C. Dairying

D. Processing

E. Farming

F. Shipbuilding

G. Timbering

This exemption is not valid for property or services used in: (a) constructing, repairing or remodeling of real property, other than real property used directly in exempt operations; or (b) maintenance, managerial, administrative, supervisory, sales, delivery, warehousing or other nonoperational activities. This exemption is not valid for vehicles that are required to be registered under the Vehicle Code, as well as supplies and repair parts for such vehicles, the PTA tire fee, and certain taxable services.

2.) Purchaser is a/an:

+ A. Instrumentality of the commonwealth (to include public schools and state universities).

+ B. Political subdivision of the commonwealth (includes townships and boroughs).

+ ● C. Municipal authority created under the Municipality Authorities Acts.

+ ● D. Electric cooperative corporations created under the Electric Cooperative Law of 1990.

● E. Cooperative agricultural associations required to pay corporate net income tax under the Cooperative Agricultural Association Corporate Net Income Tax Act (exemption not valid for registered vehicles).

+ ● F. Credit unions organized under Federal Credit Union Act or Commonwealth Credit Union Act.

+ ● G. U.S. government, its agencies and instrumentalities.

● H. Federal employee on official business (exemption limited to hotel occupancy tax only. A copy of orders or statement from supervisor must be attached to this certificate).

I. School bus operator (This exemption certificate is limited to the purchase of parts, repairs or maintenance services upon vehicles licensed as school buses by the PA Department of Transportation).

J. Charter Schools and Community Colleges.

Renewable Entities beginning with “75”:

K. Religious Organization

L. Nonprofit Educational Institution

M. Charitable Organization

Permanent Exemptions beginning with the two numbers “75”:

N. Volunteer Fire Company

O. Relief Association

Special Exemptions

P. Direct Pay Permit Holder

Q. Individual Holding Diplomatic ID

R. Keystone Opportunity Zone (beginning with two digit 72 account number)

S. Tourist Promotion Agency

Exemptions for exempt organizations K through S are limited to purchases of tangible personal property or services for use and not for sale. Exempt organizations K - O above, shall have an sales tax exemption certificate number assigned by the PA Department of Revenue. Exempt organizations K-O above, are not exempt for purchases used for the following: (1) constructions, improvement, repair or maintenance or any real property, except supplies and materials used for routine repair or maintenance of the real property; (2) any unrelated activities or operation of a public trade or business; or (3) equipment used to maintain real property.

3.) Property and/or services will be resold or rented in the ordinary course of purchaser's business. If purchaser does not have a PA Sales Tax License ID (8 digit number assigned by the department), complete Number 8 explaining why such number is not required. This exemption is valid for property or services to be resold: (1) in original form; or (2) as an ingredient or component of other property.

4.) Property or services will be used directly and predominately by purchaser in the production, delivery or rendition of public utility services as defined by the PA Utility Code.

This exemption is not valid for property or services used for the following: (1) construction, improvement, repair or maintenance of real property, other than real property used directly in rendering the public utility services; or (2) managerial, administrative, supervisor, sales or other nonoperational activities; or (3) vehicles, as well as supplies and repair parts for such vehicles, unless the predominant use is for providing a common carrier service; or (4) tools and equipment used but not installed in maintenance of facilities or direct use equipment. Tools and equipment used to repair "direct use" property are exempt from tax.

5.) Vendor/seller purchasing wrapping supplies and nonreturnable containers used to wrap property which is sold to others.

6.) Canned computer software or services to canned computer software directly utilized in conducting the business of banking purchased by a financial institution subject to the Bank and Trust Company Shares Tax (Article VII) or the Mutual Thrift Institutions Tax (Article XV).

7.) Seller is required to collect tax on canned software accessed remotely when the user is located in PA. If the billing address is a PA address, the presumption is that all users are located in PA. Purchaser is responsible for apportioning and remitting the tax due to each taxing jurisdiction and must provide the total number of licenses purchased and the number of those licenses used outside PA on Line 8. Please note that any unused licenses will be considered to be allocated to PA.

8.) Other (Attach a separate sheet of paper if more space is required).

* *Employees or representatives of the Commonwealth traveling on Commonwealth duty are exempt from any taxes on hotel stays or room rentals imposed by local governments that are in addition to the 6% state tax and the 1% Philadelphia and Allegheny County hotel occupancy tax.*

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ATTACHMENT B TO INSTRUCTIONS TO PROPOSERS

ALCOSAN SEXUAL HARASSMENT POLICY

[See Attached]

NO HARASSMENT POLICY

The Allegheny County Sanitary Authority is committed to maintaining a work environment free of discrimination. In keeping with this commitment, ALCOSAN will not tolerate harassment of its employees by anyone, including any supervisor, co-worker, vendor, client or customer of ALCOSAN or any third party, based on inherent characteristics such as race, color, sex, national origin, ancestry, place of birth, age, religious beliefs, disability, sexual orientation, and genetic information.

Harassment consists of unwelcome conduct, whether verbal, physical or visual. Harassment includes pranks, kidding and teasing. It includes displaying derogatory material or objects, such as cartoons or symbols that threaten or ridicule a particular race, religion or ethnic group. It also includes telling jokes based on racial, ethnic or sexual stereotypes, or which mock individuals based on their disability, race, color, sex, age, national origin, ethnicity, ancestry, place of birth, religion or sexual orientation. Harassment may include interfering with someone's personal belongings, working space, tools, and equipment as well as touching, pushing, and other physical contact.

Sexual harassment is conduct based on sex, whether directed towards a person of the opposite or same sex, and may include explicit sexual propositions, sexual innuendo, sexually suggestive comments, gesture or noises, off-color jokes, sexually oriented "kidding," "teasing", or "practical jokes", talking about sexual behavior or sexual preferences, creating or displaying sexually suggestive, sexually demeaning or sexually explicit objects, graffiti, magazines, posters or other printed or visual material, and physical contact such as patting, pinching, grabbing, or brushing against another person's body.

All ALCOSAN employees are responsible for ensuring that our work environment is free of harassment. ALCOSAN urges any employee who believes they have been harassed to report the harassment to the Manager of Human Resources, or, if the employee prefers, to the Executive Director. Employees who believe they have witnessed an act of harassment against another are to notify the Manager of Human Resources or the Executive Director.

ALCOSAN strictly forbids retaliation against anyone for reporting harassment, assisting in making a harassment complaint, or cooperating in a harassment investigation. If you feel you have been retaliated against, you are to notify the Manager of Human Resources or the Executive Director.

ALCOSAN'S policy is to investigate all harassment complaints thoroughly and promptly. To the fullest extent possible, ALCOSAN will keep complaints confidential. ALCOSAN will take appropriate corrective action (including discipline up to and including discharge) if an investigation confirms that a violation of this policy has occurred.

Updated 07/10/2024

ARTICLE II

PROPOSAL FORM

PROPOSER'S DECLARATION AND UNDERSTANDING

The undersigned as Proposer declares that only parties interested in this Proposal as principals are named herein; that this Proposal is made without collusion with any other person, firm or corporation as evidenced by the signing of the Non-Collusion Affidavit attached hereto as Exhibit A; that no officer or agent of the Authority is directly or indirectly interested in this Proposal; that such Proposer has carefully examined the accompanying Proposal Documents, including the Scope of Services set forth in Article III; that such Proposer agrees that if this Proposal or any part thereof is accepted, such Proposer shall enter into a Service Agreement with the Authority in the language of the Service Agreement set forth in Article IV and shall furnish the Services as specified in the Proposal Documents for the prices derived from this Proposal Form and within the period of time indicated in the Service Agreement and in accordance with the other terms and conditions of the Proposal Documents.

The undersigned Proposer represents and warrants that such Proposer is authorized to do business in the Commonwealth of Pennsylvania and the State of Ohio.

The undersigned Proposer agrees that the Service Agreement, if awarded to such Proposer, shall be entered into, under and pursuant to the laws of the Commonwealth of Pennsylvania and shall in all respects be construed in accordance with the laws of said Commonwealth.

The Proposer shall submit <u>with this Proposal</u> all documentation stated in the Instructions to Proposers and the Scope of Services (taking note of references to the Pennsylvania Right-to-Know Law discussed therein). The Proposer shall submit one (1) original and nine (9) copies and one (1) electronic copy saved to a USB thumb drive. Failure to submit such documentation may be reason to deem a Proposal non-responsive and thus result in its rejection.

INSURANCE

The Proposer further agrees that the Proposal amount(s) stated herein includes specific consideration for the specified insurance coverages.

ADDENDA

The Proposer hereby acknowledges that such Proposer has received Addenda Nos. _____, _____, _____, _____, and _____ (the Proposer shall insert the number of each Addendum received) and agrees that Addenda issued are hereby made part of the Proposal Documents, and such Proposer further agrees that this Proposal includes impacts resulting from said Addenda.

SUBCONTRACTORS

The Proposer agrees to submit a listing of subcontracting firms or businesses that will be awarded subcontracts for portions of the Services as described in the Instructions to Proposers.

SURETY

If the Proposer is awarded a Service Agreement from this Proposal, the surety who provides the Performance Bond shall be (provide name and address):

_____

_____

_____

_____

The Proposer further certifies that the surety listed as providing the Performance Bond is listed on the Treasury Department's most current list (Circular 570, as currently amended) and is authorized to transact business in the Commonwealth of Pennsylvania.

MBE/WBE PARTICIPATION

The undersigned Proposer acknowledges that such Proposer has read and understands the Authority's Policy on MBE/WBE Participation set forth in Exhibit B to this Proposal Form and has submitted an executed Certificate of Minority and Women's Business Enterprise Participation with this Proposal.

CONFLICT OF INTEREST CERTIFICATION

The undersigned Proposer has submitted an executed Conflict of Interest Certification in the form attached as Exhibit F to this Proposal Form.

PROPOSAL PRICES

All Proposers must submit one (1) quote for each of Items 1 through 3 in the table below. For Item 1, all Proposers must submit quotes for at least one (1) and no more than (4) Beneficial Use options together with a Beneficial Use Target for each option, resulting in an aggregate Beneficial Use Target for the full term of the Service Agreement (January 1, 2027 - December 31, 2029).

Item No.	**Description**	**Min. % Beneficial Use**	**Written Price (per wet ton)**	**Price in Figures**
1	Services necessary to beneficially use the Authority's Biosolids and/or process the Authority's Unlimed Solids for Beneficial Use pursuant to the following method(s):			
	Option A: _____ _____ _____	Option A: _____%	_____ Dollars and _____ Cents	$_____
	Option B: _____ _____ _____	Option B: _____%	_____ Dollars and _____ Cents	$_____
	Option C: _____ _____ _____	Option C: _____%	_____ Dollars and _____ Cents	$_____
	Option D: _____ _____ _____	Option D: _____%	_____ Dollars and _____ Cents	$_____
		Aggregate Beneficial Use Target (sum of the above Min. %'s)**:** **_____%**		

2	Services necessary to pick up the Authority's Biosolids and Unlimed Solids at the Plant and dispose at landfills.		_____ Dollars and _____ Cents	$_____
3	Services necessary to pick up the Authority's Biosolids and Unlimed Solids at Beneficial Use sites (as referenced in item 1) and dispose at landfills.		_____ Dollars and _____ Cents	$_____

- Prices shall be adjusted on each annual anniversary date of the Service Agreement by the percentage increase, if any, in the Consumer Price Index for All Urban Consumers (CPI-U), Pittsburgh metropolitan area, All Items, Base Period 1982-84=100, as published by the U.S. Bureau of Labor Statistics (or any successor index thereto); provided, however, that in no event shall any such annual adjustment exceed five percent (5%) per year. The Authority shall provide written notice to the Service Provider of the adjusted amount thirty (30) days prior to the anniversary date.

RIGHTS OF THE AUTHORITY

The Authority reserves the right to reject any or all Proposals, or to waive any informality in or to accept any Proposal, should it be determined in the interest of the Authority to do so.

All prices must be written in ink or typewritten in both words and figures. In case of a discrepancy between the price written in words and the price written in figures, the price written in words will govern.

If this Proposal is accepted by the Authority, and the undersigned Proposer fails to enter into a Service Agreement as aforesaid within ten (10) days (not including Sundays and legal holidays) from the date of the mailing of notice from the Authority to such Proposer, at the address given herewith, that the Service Agreement is ready for signature, then the Authority may procure the required Services from others, in which event such Proposer shall be liable to the Authority for the damages sustained by the Authority by reason of such default.

IN WITNESS WHEREOF, the undersigned Proposer has executed this Proposal on the date set forth below.

An Individual

By _____
(Individual's Signature)

_____
(Individual's Printed Name)

A Partnership

By _____
(Partnership Name)

_____
(Signature of General Partner)

_____
(Printed Name of General Partner)

_____
(Title of General Partner)

A Corporation or Limited Liability Company

By _____
(Corporation or Company Name)

_____
(State/Commonwealth of Incorporation or Organization)

_____
(Signature of Person Authorized to Sign)

_____
(Printed Name of Person Authorized to Sign)

_____
(Title of Person Authorized to Sign)
(Corporate Seal)

A Joint Venture

By _____
(Business Name)

_____
(Signature of Person Authorized to Sign)

_____
(Printed Name of person authorized to Sign)

By _____
(Business Name)

_____
(Signature of Person Authorized to Sign)

_____
(Printed Name of Person Authorized to Sign)

(Each joint venturer must sign. Each individual, partnership, corporation, and company that is a party to the joint venture should sign in the manner indicated above.)

Name, Phone Number, and Address for receipt of official communications and for additional information on this Proposal:

_____

_____

_____

_____

Witness_____
(Signature)

_____
(Printed Name)

Submitted on _____, 2026

EXHIBIT A TO PROPOSAL FORM

NON-COLLUSION AFFIDAVIT

[See Attached]

INSTRUCTIONS FOR
NON-COLLUSION AFFIDAVIT

This Non-Collusion Affidavit is material to any contract awarded pursuant to the Request for Proposal (RFP). According to the Pennsylvania Antibid-Rigging Act, 62 Pa.C.S.A. § 4501, *et seq*., governmental agencies may require Non-Collusion Affidavits to be submitted together with proposals.

This Non-Collusion Affidavit must be executed by a manager, member, officer, director, owner or employee of the Proposer who is authorized to legally bind the Proposer.

Bid rigging and other efforts to restrain competition, and the making of false sworn statements in connection with the submission of bids, are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself/herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Proposer with responsibilities for the preparation, approval or submission of the Proposal.

The term "complementary Proposal" as used in the Affidavit has the meaning commonly associated with that term in the RFP process, and includes the knowing submission of Proposals higher than the Proposal of another firm, any intentionally high or noncompetitive Proposal, and any other form of Proposal submitted for the purpose of giving a false appearance of competition.

Failure to file an Affidavit in compliance with these instructions will result in disqualification of the Proposal.

NON-COLLUSION AFFIDAVIT

State of _____

County of _____

Company Name: _____

Being duly sworn or affirmed according to law, I, _____ depose and
(Name of Affiant)
say that:

(1) I am _____ of _____
(Title) (Name of Company)
and that I am authorized to make this Affidavit on behalf of my company, and its managers, members, officers, directors, and/or owners. I am fully informed of the preparation and contents of the attached Proposal.

(2) The price(s) and amounts contained in this Proposal have been arrived at independently and without consultation, communication or agreement with any other contractor, Proposer or potential Proposer.

(3) Neither the price(s) nor the amounts contained in this Proposal, and neither the approximate price(s) nor approximate amounts contained in this Proposal, have been disclosed to any other company or person who is a Proposer or potential Proposer, and they will not be disclosed before the Proposal submission date.

(4) No attempt has been made or will be made to induce any company or person to refrain from submitting a Proposal on this contract, or to submit a Proposal higher than this Proposal, or to submit any intentionally high or non-competitive Proposal or other form of complementary Proposal.

(5) The Proposal of my company is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any company or person to submit a complementary or other non-competitive Proposal.

(6) _____, its affiliates, subsidiaries, officers, directors
(Name of Company)
and employees are not currently under the investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to proposing and/or bidding on any public contract, except as follows:

(7) _____ understands and acknowledges that
(Name of Company)
the above representations are material and important and will be relied on by the Allegheny County Sanitary Authority in awarding the contract(s) for which this Proposal is submitted. I understand and my firm understands that any misstatements in this Affidavit is and shall be treated as fraudulent concealment from the Allegheny County Sanitary Authority of true facts relating to the submission of Proposals for this contract.

Name: _____

Signature: _____

Title: _____

SWORN TO AND SUBSCRIBED
BEFORE ME THIS _____ DAY
OF_____, 20____

_____

Notary Public
My Commission Expires:

EXHIBIT B TO PROPOSAL FORM

POLICY ON MBE/WBE PARTICPATION

CERTIFICATE OF MINORITY AND WOMEN'S BUSINESS ENTERPRISE PARTICIPATION

AND

MBE/WBE SOLICITATION AND COMMITMENT STATEMENT

[See Attached]

Policy on MBE/WBE Participation

It is the policy of the Allegheny County Sanitary Authority (the "Authority") to award a fair share of Contracts to minority and women's businesses. This policy supports the statutory requirements of the National Environmental Policy Act, 42 USC 4370d, and its regulatory provisions, 40 CFR 30.44b. Both the law and the regulation mandate procurement practices under EPA Grant Programs.

The Authority's goal is that ten to twenty-five percent (10-25%) of all Contract dollars be awarded to minority or women's business enterprises. The Authority will make every effort to meet that goal in its Contracts as well as encourage that goal among its contractors and their subcontractors.

The Authority uses affirmative steps to assure that minority and women's businesses are used when possible as sources of supplies, equipment, construction and services. The Authority encourages its contractors to take the same measures when recruiting subcontractors. Affirmative steps include the following:

a) Including minority and women's businesses on solicitation lists and contacting them whenever they are potential sources.

b) Use of area newspapers that serve minority or women's groups for advertising for contracts when work permits. A statement of this policy shall be included in the ad text.

c) Use of minority or women's business associations to contact businesses of this type and a list of these organizations is maintained at the Authority.

d) Dividing total requirements when economically feasible into small tasks or quantities to permit maximum participation of minority and women's businesses.

e) Establishing delivery schedules when the requirements of the work permit that shall allow these businesses to participate.

f) Requiring each party to a sub-agreement to take the affirmative steps listed above.

g) Procuring goods and services from labor surplus area firms.

Further information may be obtained at the office of the Authority.

CERTIFICATE OF MINORITY AND WOMEN'S BUSINESS
ENTERPRISE PARTICIPATION

The undersigned Proposer certifies that it understands and agrees to the minority participation goal applicable to this Service Agreement for Biosolids Management Services (the "Agreement"), and shall strive to expend from ten to twenty-five percent (10-25%) of the total cost of the Agreement for Minority and Women's Business Enterprise participation.

The undersigned **Proposer** hereby certifies that it understands that a MBE/WBE Solicitation and Commitment Statement must be submitted as part of its Proposal at or prior to the time set for the opening of Proposals, and that the Proposer's failure to submit a completed and signed MBE/WBE Solicitation Form and Commitment Statement will constitute a non-responsive Proposal, which will be ineligible for consideration.

Failure of the Proposer to comply with these conditions or failure to sign and submit this Certificate with its Proposal will disqualify the Proposer.

Name of Proposer:_____
Signed:_____
Title:_____
Date:_____

THIS CERTIFICATE MUST BE COMPLETED
AND SUBMITTED WITH THE PROPOSAL.

SOLICITATION AND COMMITMENT STATEMENT

MINORITY (MBE) AND FEMALE (WBE) OWNED BUSINESS ENTERPRISES

Biosolids Management Services	NAME OF PROPOSER	ADDRESS	PHONE

List below all MBE/WBE's that were solicited - whether or not a commitment was obtained - - Copy this form as necessary

☐ MBE ☐ WBE	TYPE OF SUBCONTRACT WORK OR MATERIALS	DATE SOLICITED BY PHONE	BY MAIL	COMMITMENT MADE YES (IF YES, GIVE DATE)	NO	GIVE REASON(S) IF NO COMMITMENT MADE
COMPANY NAME						
ADDRESS		QUOTE RECEIVED YES NO		AMOUNT COMMITTED DOLLAR AMOUNT $		
CONTACT PERSON PHONE		MBE/WBE CERTIFICATION #		PERCENT OF TOTAL PROPOSAL %		

☐ MBE ☐ WBE	TYPE OF SUBCONTRACT WORK OR MATERIALS	DATE SOLICITED BY PHONE	BY MAIL	COMMITMENT MADE YES (IF YES, GIVE DATE)	NO	GIVE REASON(S) IF NO COMMITMENT MADE
COMPANY NAME						
ADDRESS		QUOTE RECEIVED YES NO		AMOUNT COMMITTED DOLLAR AMOUNT $		
CONTACT PERSON PHONE		MBE/WBE CERTIFICATION #		PERCENT OF TOTAL BID %		

☐ MBE ☐ WBE	TYPE OF SUBCONTRACT WORK OR MATERIALS	DATE SOLICITED BY PHONE	BY MAIL	COMMITMENT MADE YES (IF YES, GIVE DATE)	NO	GIVE REASON(S) IF NO COMMITMENT MADE
COMPANY NAME						
ADDRESS		QUOTE RECEIVED YES NO		AMOUNT COMMITTED DOLLAR AMOUNT $		
CONTACT PERSON PHONE		MBE/WBE CERTIFICATION #		PERCENT OF TOTAL BID %		

Prepared by:_____ Title: _____ Phone: _____

NOTE: Procuring goods and services from MBE/WBE companies is an essential requirement in meeting these goals.
NOTE: It is recommended that Certification and letters of intent for each MBE/WBE commitment accompany this Solicitation and Commitment Statement.

EXHIBIT C TO PROPOSAL FORM

PERFORMANCE BOND

[See Attached]

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____, as "Principal", and the _____, a corporation, incorporated under the laws of the State of _____, as "Surety", are held and firmly bound unto the Allegheny County Sanitary Authority, herein called the "Authority" or "Owner," its attorneys, successors or assigns in the sum of _____ Dollars ($_____), lawful money of the United States of America, for payment of which sum will and truly be made, we bind ourselves, our heirs, legal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a Service Agreement for Biosolids Management Services with the Owner, dated _____, 2026 (herein called the "Agreement") in accordance with the Proposal Documents included with the Owner's Request for Proposals dated _____ 2026 (the "Proposal Documents").

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal shall faithfully perform, fulfill, and faithfully keep all undertakings, duties, covenants, terms, conditions, and agreements (including any warranties) agreed by it to be performed and kept at the time and in the manner provided in the Agreement and the Proposal Documents, as the same may from time to time be amended or altered and shall defend, indemnify, and save harmless the Owner, its officers, agents, Board members, and employees from any and all cost, damage, liens, and demands by reason of the manner in which such undertakings are performed or kept and from any expense incurred by reason of the Principal's failure to perform and keep all its undertakings under the Agreement or the Proposal Documents and from damages growing out of the manner of performance of said Agreement or the Proposal Documents so set forth in the Agreement or the Proposal Documents and actual damages caused by delayed performance or non-performance of the Principal including liquidated damages and including but not limited to patent, trademark, copyright infringements, or other intellectual property violations, as set forth in the Agreement or the Proposal Documents, then this obligation shall become void and of no effect; otherwise it shall remain in full force and effect.

It is further agreed that any changes, extensions, alterations, deductions, or additions which may be made in the terms of the Agreement or the Proposal Documents, or in the work to be done, or materials to be furnished, or labor to be supplied or performed, or equipment to be rented, or public utility services to be rendered, or the giving by the Owner of any extension of time for the performance of the Agreement, or reduction of the retainage percentage as permitted by the Agreement, or any other forbearance on the part of either the Owner or the Principal to the other, shall not in any way release the Principal and the Surety or either of them, their heirs, executors, administrators, successors, or assigns, from their liability for such and hereunder; notice to the Surety or Sureties of any such changes, extensions, alterations, deductions, additions, or forbearance being hereby waived.

It is further agreed that in case of default and/or any action arising out of the rights and liabilities secured by this obligation, any party thereto or any person claiming by or through either may use for the purpose of establishing its or their claim a copy of this obligation, certified by the Owner and the action or actions, if any, arising on the within obligation, shall not be a bar to any subsequent action that may arise through any liability incurred in any other action therein or based upon any other part of this obligation. In the event of termination of the Principal for cause, the Surety shall remain fully liable to the Owner for the Principal's failure to timely complete the Agreement and any liquidated damages.

It is further stipulated and agreed that if the Principal is a non-Pennsylvania corporation or limited liability company, neither the Principal nor the Surety shall be discharged from liability on this Bond, nor the Bond surrendered, until such Principal files with the Owner a certificate from the Pennsylvania Department of Revenue evidencing the payment in full of all bonus taxes, assessments, penalties, charges, and interest, and a certificate from the Bureau of Employment and Unemployment Compensation of the Pennsylvania Department of Labor and Industry, evidencing the payment of all unemployment compensation contributions, penalties, and interest due the Commonwealth of Pennsylvania from the said Principal, or any non-Pennsylvania corporation, company, subcontractor thereunder, or for which liability has accrued but the time for payment has not arrived, as required by the Act of June 10, 1947, P.L. 493, 8 P.S. sec 23, or as amended or superseded.

Said Surety agrees that its liability hereunder shall be absolute regardless of any liability of the Principal hereunder whether by reason of any irregular or unauthorized execution of or failure to execute this Bond or otherwise.

The Agreement, together with the Proposal Documents, shall be deemed a part hereof as fully as if set forth herein, a true and correct copy of which has been obtained by the Surety, receipt of which is hereby acknowledged. Failure of the Surety to obtain a copy of the Agreement or the Proposal Documents shall not be grounds for refusal by the Surety to investigate and respond to a claim under this Bond made by the Owner.

This Bond shall be governed and enforced in accordance with the laws of the Commonwealth of Pennsylvania.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument under their several seals this _____ day of _____, 2026, the name and corporate seal of each party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

SURETY COMPLETE THIS PAGE

_____
(Corporate Surety)

_____
(Street Address)

_____
(City, State and Zip Code)

ATTEST:

By: _____*
(Signature)

_____

_____
(Title)

Date: _____, 2026

(AFFIX CORPORATE SEAL)

* The Surety should attach to this Performance Bond a currently certified Power of Attorney which should be dated, sealed, and executed by a live (not facsimile) signature showing that the person signing this Bond for the Surety has the current authority to do so.

CORPORATION OR LIMITED LIABILITY COMPANY COMPLETE THIS PAGE

_____ is a corporation/limited liability company organized and existing under the laws of _____with principal place of business at

_____

(Street Address) (City, State and Zip Code)

and, if a non-Pennsylvania corporation [has] / [has not] been granted a certificate of authority to do business in Pennsylvania, as required by the Pennsylvania Business Corporation Law of 1988, approved December 21, 1988, P.L. 1444, as amended, 15 Pa. C.S.A. §§ 4101 et seq.

ATTEST: _____

(Name of Corporation or Company)

_____ _____

(Signature of Certifying Officer) (Signature of Authorized Officer)

Date: _____, 2026 _____

(Typed name of Authorized Officer)

(AFFIX CORPORATE SEAL)

(The corporation/company shall make certain that the secretary or assistant secretary or manager certifies the official character and authority of the person or persons executing this Performance Bond for the Principal according to the form attached hereto. In lieu of such certificate, attach to this Bond copies of the records of the corporation/company that show the official character and authority of the officer signing. The records shall be duly certified to be true copies by the secretary or assistant secretary or manager under corporate seal.)

CORPORATION OR LIMITED LIABILITY COMPANY COMPLETE THIS PAGE

CERTIFICATE AS TO CORPORATE OR COMPANY OFFICER

I, _____, certify that I am [secretary]/[assistant secretary]/[manager] of the corporation/company executing the within Performance Bond; that _____ who signed the said Bond on behalf of the corporation/company was then _____ of said corporation/company; that I know his/her signature and his/her signature thereto is genuine; and that said Bond was duly signed, sealed, and attested for and in behalf of said corporation/company by authority of its governing body.

Date: _____, 2026 _____

(Signature of secretary, assistant secretary, manager)

(AFFIX CORPORATE SEAL)

PARTNERSHIP COMPLETE THIS PAGE

_____ is a partnership trading under a fictitious or assumed name and [has] / [has not] registered under the Fictitious Names Act of Pennsylvania, namely, the Act of December 16, 1982, P.L. 1309, as amended, 54 Pa. C.S.A. §§ 301 et seq.

_____
(Fictitious or assumed name)

WITNESS:

_____*(SEAL)
(Partner trading as above)

_____

_____*(SEAL)
(Partner trading as above)

Date: _____, 2026

(Street Address)

_____
(City, State, and Zip Code)

* If the executing party is a partnership, the document must be signed in the name of the partnership by at least two general partners, and the names and addresses of all the partners must be listed on the attached Certificate. The partnership must also attach a Certificate of Registration under the provisions of the Fictitious Names Act.

PARTNERSHIP COMPLETE THIS PAGE
CERTIFICATE AS TO PARTNERSHIP

I, a partner of _____, the partnership named as Principal in the within Performance Bond, certify that the following are the names and addresses of all the partners of said partnership:

_____	_____
(Name)	(Name)
_____	_____
(Address)	(Address)
_____	_____
(City, State, and Zip Code)	(City, State, and Zip Code)
_____	_____
(Name)	(Name)
_____	_____
(Address)	(Address)
_____	_____
(City, State, and Zip Code)	(City, State, and Zip Code)

Date: _____, 2026

_____
(Signature of Certifying Partner)

INDIVIDUAL COMPLETE THIS PAGE
(WHEN THE PRINCIPAL IS AN INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME)

_____ is an individual trading under a fictitious or assumed name and [has] / [has not] registered under the Fictitious Names Act of Pennsylvania, namely, the Act of December 16, 1982, P.L. 1309, as amended, 54 Pa. C.S.A. §§ 301 et seq.

_____
(Fictitious or assumed name)

WITNESS:

By: _____ (SEAL)
(Individual doing business as above)

_____

_____
(Street Address)

Date:_____, 2026

_____
(City, State, and Zip Code)

(WHEN THE PRINCIPAL IS AN INDIVIDUAL DOING BUSINESS IN HIS/HER INDIVIDUAL NAME)

_____
(Individual Name)

WITNESS:

By: _____ (SEAL)
(Individual)

_____

_____
(Street Address)

Date:_____, 2026

_____
(City, State, and Zip Code)

STATEMENT OF SURETY COMPANY

In accordance with the provisions of **THE SERVICE AGREEMENT FOR BIOSOLIDS MANAGEMENT SERVICES,** dated _____, 2026, by and between the ALLEGHENY COUNTY SANITARY AUTHORITY and _____, referred to as the "Provider" in said Agreement and as the "Principal" in the Performance Bond, the Surety on the Performance Bond of the said Principal, after a careful examination satisfied this Surety Company that all claims which in any way relate to the performance of the work under said Agreement have been satisfactorily settled, hereby approves of the final payment to the said Principal, and by these presents witnesseth that payment to the Principal of the final estimate shall not relieve the Surety Company of any of its obligations to the Allegheny County Sanitary Authority as set forth in the said Surety Company's Performance Bond.

IN WITNESS WHEREOF, the said Surety Company has hereunto set its hand and seal this day of _____, 2026.

ATTEST:

_____ _____

Secretary Surety Company

By: _____

President

(AFFIX CORPORATE SEAL)

NOTE: The Surety should attach to this Statement a currently certified Power of Attorney which should be dated, sealed, and executed by a live (not facsimile) signature showing that the person signing this Statement for the Surety has the current authority to do so.

EXHIBIT D TO PROPOSAL FORM

PROPOSER'S QUALIFICATIONS STATEMENT

[See Attached]

PROPOSER'S QUALIFICATIONS STATEMENT

Submitted by: _____

(A Corporation)
(A Limited Liability Company)
(A Partnership)
(An Individual)

The signatory of this Statement guarantees the truth and accuracy of all information and responses set forth herein.

A. How many years has your organization been in business under your present business name?

_____

B. How many years of experience does your organization have in the management of Biosolids and Unlimed Solids? Describe the type(s) of experience in detail and attach additional sheets as necessary.

_____

_____

C. List and provide the following information for each governmental or municipal agency and business entity for which your organization is currently or has in the last five (5) years provided management services for Biosolids and Unlimed Solids, starting with at least three (3) agencies or entities to which your organization is providing or has provided management services for at least 20,000 wet tons of Biosolids and Unlimed Solids annually: (i) name of agency or entity, (ii) description of each type of service performed and specification of tonnage amounts per year, (iii) address and telephone number of agency or entity, (iv) contact

person at agency or entity, with telephone number, and (v) whether current or past services with start dates and end dates, as applicable. Attach additional sheets if necessary.

1. _____

_____

_____

_____

_____

2. _____

_____

_____

_____

_____

3. _____

_____

_____

_____

_____

4. _____

_____

_____

_____

_____

5. _____

_____

_____

_____

_____

D. Submit additional sheets with details if the answer is "yes" to any of the following seven (7) questions for the Proposer:

1. Has your organization ever failed to complete any work awarded to it? _____

2. Are there any judgments, claims, arbitration proceedings, or suits pending or outstanding against your organization or its officers? _____

3. Has your organization filed any lawsuits or requested arbitration with regard to any agreements/contracts within the last five (5) years? _____

4. Has your organization received any notices of violation, inspection reports indicating a non-compliance issue/event, and/or notices of pending or, to your knowledge, threatened enforcement action from any local, state, or federal regulatory agency or Governmental Authority with respect to your organization's operations in Pennsylvania and Ohio in the last three (3) years? _____

5. Has your organization, or any agency or entity for which your organization provides management services for Biosolids and Unlimed Solids, received a notice of violation, inspection report indicating a non-compliance issue/event, or notices of pending or, to your knowledge, threatened enforcement action from the United States Environmental Protection Agency, the Pennsylvania Department of Environmental Protection, the Ohio Environmental Protection Agency, the Occupational Safety and

Health Administration, or any other Governmental Authority in the last three (3) years? _____

6. Is your organization subject to any pending or, to your knowledge, threatened suits, demands, actions, orders and/or investigations by any Governmental Authority for violations of Applicable Laws and Regulations, including clean-up or cost recovery claims under federal or state environmental laws, including the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and/or similar state laws? _____

7. Has your organization had any spills or releases in the last three (3) years for which it had an obligation to report under Applicable Laws and Regulations and/or applicable Permits?

E. Submit additional sheets with details if the answer is "yes" to any of the following seven (7) questions for all proposed subcontractors referenced in your organization's Proposal Documents, with identifying information for each such subcontractor:

1. Has this subcontractor ever failed to complete any work awarded to it? _____

2. Are there any judgments, claims, arbitration proceedings, or suits pending or outstanding against this subcontractor or its officers? _____

3. Has this subcontractor filed any lawsuits or requested arbitration with regard to any agreements/contracts within the last five (5) years? _____

4. Has this subcontractor received any notices of violation, inspection reports indicating a non-compliance issue/event, and/or notices of pending or, to its or your knowledge, threatened enforcement action from any local, state, or federal regulatory agency or

Governmental Authority with respect to this subcontractor's operations in Pennsylvania and Ohio in the last three (3) years? _____

5. Has this subcontractor, or any agency or entity for which this subcontractor provides management services for Biosolids and Unlimed Solids, received a notice of violation, inspection report indicating a non-compliance issue/event, or other pending, or to its or your knowledge, threatened enforcement action from the United States Environmental Protection Agency, the Pennsylvania Department of Environmental Protection, the Ohio Environmental Protection Agency, the Occupational Safety and Health Administration, or any other Governmental Authority in the last three (3) years? _____

6. Is this subcontractor subject to any pending or, to its or your knowledge, threatened suits, demands, actions, orders and/or investigations, by any Governmental Authority for violations of Applicable Laws and Regulations, including clean-up or cost recovery claims under federal or state environmental laws, including CERCLA and/or similar state laws? _____

7. Has this organization had any spills or releases in the last three (3) years for which it had an obligation to report under Applicable Laws and Regulations and/or applicable Permits? _____

F. Attach a financial statement, preferably audited, including your organization's latest balance sheet and income statement showing the following items:

1. Current assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory, and prepaid expenses).

2. Net fixed assets.

3. Other assets.

4. Current liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries, and accrued payroll taxes).

5. Other liabilities (e.g., capital, capital stock, authorized and outstanding shares par values, earned surplus, and retained earnings).

6. Name and address of firm preparing attached financial statement and date thereof.

G. Is the attached financial statement for the Proposer to which the information and questions in this Statement relate? _____. If not, explain the relationship and financial responsibility to the Proposer of the organization whose financial statement is provided (e.g., parent-subsidiary).

H. Attach evidencing letters for the Performance Bond and required insurance.

I. Attach a letter of credit for the performance of Services.

J. Provide evidence of the Experience Modification Rate (EMR) assigned to your organization by your organization's workers' compensation insurance carrier for the past three (3) years. _____

Date: _____

Name of Organization: _____

By: _____

Title: _____

_____being duly sworn deposes and says that the information herein is true and sufficiently complete so as not to be misleading.

Subscribed and sworn before me this date: _____
Notary Public: _____
My Commission Expires: _____

EXHIBIT E TO PROPOSAL FORM

CERTIFICATION OF SAFETY PROCEDURES COMPLIANCE

[See Attached]

CERTIFICATION OF SAFETY PROCEDURES COMPLIANCE

I, _____, as _____ of
(Typed Name) (Title or Office)
_____, a _____,
(Name of Corporation/Limited Liability Company/Partnership) (Type of Entity)

hereby certify that I have read and understand the Safety Procedures as enumerated in the "Health, Safety, and Environmental Compliance" provision of the Instructions to Proposers (Article I), the "Health and Safety" provision of the Scope of Services (Article III), and the "Compliance with Laws" and "Compliance with Health and Safety Laws" provisions of the Service Agreement (Article IV) of the Proposal Documents associated with Biosolids Management Services, and that all work will be conducted in accordance with these above listed provisions, applicable OSHA standards, applicable standards of any state-equivalent statute to OSHA, and other applicable safety precautions.

Date:_____ By:_____

EXHIBIT F TO PROPOSAL FORM

CONFLICT OF INTEREST CERTIFICATION

[See Attached]

Project Name: Biosolids Management Services

CONFLICT OF INTEREST CERTIFICATION

I state that I am___(Title)_____ of __(Company Name)_ and that I am authorized to make this affidavit on behalf of my company, and its owners, directors, and officers. I am fully informed of the preparation and contents of the attached Proposal.

I hereby certify that relevant personnel from _(Company)_ have reviewed the Scope of Services of the referenced ALCOSAN RFQ/RFP and understand its contents. I also certify that no real or potential, personal or corporate conflict of interest exists with (Company) under this procurement.

I understand that a conflict of interest may arise over the period of this procurement. _(Company)_ shall notify ALCOSAN in writing of any financial interest, personal activity, or relationship that could impair my company's ability to act impartially and in the best interest of ALCOSAN when performing under the contract.

(Company) its affiliates, subsidiaries, officers, directors, or employees do not currently perform any work which may result in a potential or real conflict. Nor is_(Company)_ or any of its employees under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving a conflict of interest with respect to proposing and/or bidding on any public contract, except as follows:

I state that _(Company)_ understands and acknowledges the above representations are material and important, and will be relied on by the Allegheny County Sanitary Authority in awarding the contract(s) for which this Proposal is submitted. I understand and _(Company)_ understands that any misstatements in this Certification is and shall be treated as fraudulent concealment from the Allegheny County Sanitary Authority of true facts relating to the submission of Proposals for this contract.

Name: _____

Signature: _____

Title: _____

Date: _____

ARTICLE III

SCOPE OF SERVICES

3.1 **Policy**. The Authority's policy is to beneficially use as much Biosolids as reasonably possible. The Authority's Class B lime-stabilized Biosolids material is called ALCOSOIL. ALCOSOIL is comprised of organic and inorganic matter similar to humus and contains macro-nutrients (N, P, and K) and micro-nutrients (Cu, Zn, etc.).

3.2 **Historical Practice**. The Authority currently has no Biosolids or sludge storage capability at its Plant. The solids removed from the wastewater must be removed from the Plant in a timely manner, consistent with applicable Permits (as defined in Section 1.2 of Article I). This removal has been accomplished by incineration, Beneficial Use, and landfilling. Beneficial Use has been land application to agricultural land, land reclamation of disturbed ground, SDSS (Sludge Derived Synthetic Soil) for daily landfill cover, and capping cells at landfills.

For the past thirty-five (35) years, approximately half of the solids have been incinerated and the heat generated by that process has been used to make steam for heating in the Plant; the rest of the solids have been lime-stabilized, and either beneficially used by the Authority's Biosolids service providers or disposed in landfills by the Authority's Biosolids service providers or by the Authority's personnel and equipment.

3.3 **Objective**. US EPA has stated that sewage sludge is a valuable resource and promotes its Beneficial Use for land application and reclamation. PA DEP has stated that Beneficial Use of sewage sludge is safe and effective when done in compliance with Applicable Laws and Regulations (as defined in Section 1.2 of Article I). Beneficial Use is supported by civic and environmental organizations when done in compliance with Applicable Laws and Regulations. The Authority's goal is to beneficially use, or recycle, as much material generated by its Plant as possible and with all due concern for public health and the environment.

As more fully set forth below, the Service Provider shall be required to provide Services for three (3) years, which shall include, but not be limited to, the removal, transportation, possible further processing or combination with other materials, and Beneficial Use, or disposal of Biosolids and Unlimed Solids removed from the wastewater collected by the Authority at its Plant. The acceptable Beneficial Uses are land application, land reclamation (including mine reclamation at active and inactive coal and noncoal mining sites), tree trenching, use as an additive for composting, further processing of Unlimed Solids for Beneficial Use, regional storage for later Beneficial Use, or other Beneficial Uses approved by the Authority. As necessary, the acceptable disposal method is landfilling, or other disposal methods approved by the Authority. The Service Provider shall perform these Services in accordance with Applicable Laws and Regulations and all applicable Permits.

The specific objectives of these Proposal Documents are as follows:

1. To provide the Authority with management services for an average of 2,500 wet tons per month of the treated sewage sludge ("Biosolids") and unlimed sewage sludge ("Unlimed Solids") that is generated by the Authority's wastewater treatment plant (the "Plant") for at least the next three (3) years.

2. To provide the Services as a package including each of the following components:

   a. Beneficial Use (land application, land reclamation, tree-trenching, use as an additive for composting, further processing of Unlimed Solids for Beneficial Use, regional storage for later Beneficial Use, or other beneficial methods approved by the Authority) of Biosolids and Unlimed Solids.

      Proposers are encouraged to diversify their methods of Beneficial Use by proposing up to four (4) options for Beneficial Use and to not entirely rely on any one (1) method of Beneficial Use. Proposers shall maximize Beneficial Use during the term of the Service Agreement and shall identify Beneficial Use Targets for each Beneficial Use option and an aggregate Beneficial Use Target comprised of all such options (the "Beneficial Use Target"), as set forth in the Proposal Prices section of the Proposal Form for the Services in Article II. Failure to achieve the aggregate Beneficial Use Target will result in penalties as described in Section 3.4, Paragraph 5 (Beneficial Use Targets) of this Article III.

   b. Disposal (landfilling) of Biosolids and Unlimed Solids.

      Proposers shall provide a Disposal Plan, such as landfilling, for those times when the Beneficial Use option for Biosolids and Unlimed Solids is, through unforeseen or uncontrollable circumstances, not operational or permitted, as discussed in further detail in these Proposal Documents. Proposers shall have a preferred list of disposal facilities but also must demonstrate the ability to use backup disposal facilities or methods. While pickup of Biosolids and Unlimed Solids pursuant to the Disposal Plan will primarily be from the Plant, Proposers shall anticipate that pickup for disposal may include retrieval from Beneficial Use sites from time to time.

3. To provide the Services so that the Biosolids and Unlimed Solids are removed from the Plant in accordance with the terms set forth in these Proposal Documents and in a timely and cost effective manner as further stated below, in coordination with the Plant's operating schedule, and under an Odor Control Plan that is in accordance with the US EPA's *Biosolids and Residuals Fact Sheet: Odor Control in Biosolids Management* (EPA 832-F-00-067) and other Applicable Laws and Regulations and the applicable Permits.

4. To provide the Services in accordance with all Applicable Laws and Regulations and the applicable Permits in accordance with the Authority's stated mission: "To provide cost effective, customer oriented, environmentally conscious wastewater

treatment that protects public health and enhances the use of our natural resources." Treatment and use/disposal of Biosolids and Unlimed Solids are an integral part of the Plant's wastewater treatment responsibilities.

3.4 Biosolids Management Service Agreement Implementation. A detailed description of the work required for these Biosolids Management Services is set forth below:

1. Quantities

Over the last several years, the Authority has generated approximately 300 wet tons per day of organic solids or 115,000 wet tons per year from the Plant's wastewater treatment processes. With upcoming Plant expansion projects, these production totals may change. Currently, approximately fifty percent (50%) of the solids are incinerated, with the remaining tonnage being lime stabilized.

Previously, about 38,000 wet tons of Biosolids per year have been handled under prior Service Agreements. With the Service Agreement contemplated under these Proposal Documents, however, no daily, weekly, or monthly quantities are guaranteed. The Service Provider should be flexible to handle small and large amounts of material for long periods of time. As few as 1,200 tons per month have been handled, and emergency conditions may require the Service Provider to remove the Plant's entire sludge load, processed into Biosolids, as well as some measure of Unlimed Solids from time to time, for several months. In the Authority's experience over the past three (3) years, the minimum monthly amount of Biosolids was 1,584 wet tons, the maximum monthly amount of Biosolids was 5,073 wet tons, and the average monthly amount of Biosolids was 3,228 wet tons. The Service Provider should be able to manage 7,500 wet tons per month during emergency conditions.

Should the Authority fail to provide the Service Provider with an average of 30,000 wet tons per year of Biosolids and Unlimed Solids over the term of the Service Agreement (other than due to events of Force Majeure pursuant to the Service Agreement), which amount shall be determined as part of the Reconciliation discussed in Section 3.4, Paragraph 23 (Payment) of this Article III, the Authority shall pay the Service Provider the sum of Thirty-Five Dollars ($35.00) per wet ton of shortfall to assist the Service Provider in covering its fixed costs. Conversely, should the Service Provider fail to meet the aggregate Beneficial Use Target established by the Service Provider over the term of the Service Agreement, determined as a percentage of wet tonnage supplied by the Authority, the Service Provider shall pay the Authority the penalty described in Section 3.4, Paragraph 5 (Beneficial Use Targets) of this Article III, which amount shall also be determined as part of the Reconciliation discussed in Section 3.4, Paragraph 23 (Payment) of this Article III.

2. Quality

Sludge from the primary and secondary treatment processes has historically been co-settled prior to dewatering and lime stabilization. During dry weather, the waste activated sludge will continue to be co-settled with the primary sludge in the primary tanks, consistent with historic practice, and will then be pumped into the holding tank feeding the centrifuges. Polymer will be added to improve dewatering.

In accordance with the requirements of ALCOSAN's Clean Water Plan, this process is being modified during wet weather flows. During wet weather flows, waste activated sludge will go from the secondary clarifiers directly into holding tanks feeding gravity belt thickeners. Polymer will be added to aid dewatering. The thickened solids will be sent to the main tanks holding the primary sludge to be fed into centrifuges. The Authority anticipates these changes will be completed by the end of 2026. The Authority is also simultaneously upgrading its current centrifuge equipment. As of May 1, 2026, three (3) of the seven (7) new centrifuges are installed. These upgrades could modify sludge quality.

In either dry or wet weather, the resultant dewatered Unlimed Solids will be approximately thirty percent (30%) solids. Crushed pebble quick lime is added to this cake to produce the Biosolids that are to be beneficially used. An average of five to seven percent (5-7%) lime on a wet ton basis is added to the sludge; the final product varies slightly but averages thirty-four percent (34%) total solids.

The Biosolids have an initial pH above 12, which is maintained for at least two (2) hours without the addition of any more lime, as well as a pH level of at least 11.5 for another twenty-two (22) hours. The pH is analyzed by approved test methods, and the Biosolids meet the US EPA, PA DEP and OEPA regulations for Class B biosolids suitable for land application and other Beneficial Uses. If pH results do not meet these minimum requirements, the Authority will endeavor to notify the Service Provider so that material can be diverted from Beneficial Use.

The Service Provider shall be able to run its operation with Biosolids and Unlimed Solids that vary with respect to quality (total solids content and consistency) without modification to the Service Agreement.

Appendix A includes the most recent analysis conducted on the Biosolids. Appendix B includes the most recent analysis conducted on the Unlimed Solids. The Authority does not guarantee that the quality of Biosolids and Unlimed Solids will be consistent with the analyses reported in Appendix A or Appendix B, respectively.

3. Trucking Operation

Biosolids and Unlimed Solids will be loaded by the Authority Operations Department into the Service Provider's trucks at the Plant to be transported to permitted landfills, processing sites, and (as to Biosolids) land application sites, land reclamation sites (including coal and noncoal mining sites), tree-trenching sites, or other Beneficial Use sites in accordance with the operational procedures described in these Proposal Documents and consistent with tonnage limits set forth in the applicable Permits. The Service Provider shall understand that loading times may vary depending on conditions in the Plant such as equipment malfunctions, amount of sludge available, and other situations. **Truck loading times may vary from ten (10) minutes to ninety (90) minutes, and the trucks must remain at the Plant to be filled and get loads out. Please note that t**he **average load time during 2025 was approximately thirty (30) minutes.** This "load time" issue is critical. If for any reason the Authority cannot load trucks that are already on site and waiting, there will be no penalty to the Authority, except as provided for by Section 3.4, Paragraph 29 (Demurrage) of this Article III.

From time to time during the term of the Service Agreement, the Authority may request that the Service Provider retrieve Biosolids from Beneficial Use sites and other locations to be transported to permitted landfills or other destinations, in which case the Service Provider's trucks will be loaded by the Service Provider's personnel.

Highway regulations, weight limits, idling restrictions, and other Applicable Laws and Regulations (including municipal ordinances) will be observed at all times. Trucking schedules and routes will not adversely impact local community transportation systems. The Service Provider shall be responsible for bonding roads and obtaining and complying with hauling authorizations from applicable Governmental Authorities and shall provide ALCOSAN with copies of same upon receipt.

The Service Provider shall maintain all the required signage, manifests, and equipment needed for loading and hauling services, including spill response materials, emergency contacts and SOP procedures for each of the vehicles transporting Biosolids and Unlimed Solids from the Plant, from Beneficial Use sites, or otherwise when in service to the Authority. Transportation logs and other records required under these Proposal Documents, the Service Agreement, Applicable Laws and Regulations, and the applicable Permits will be kept and maintained by the Provider and provided to ALCOSAN in accordance with the Service Agreement.

The Service Provider shall be responsible for providing trucks of appropriate size for loading at the Plant. All trucks must be equipped with a CB Radio. Trucks shall be clean and free of residual sludge and other materials when entering the Plant.

Biosolids and Unlimed Solids shall be transported in approved open-body trucks or trailers that are covered and leak-proof. Each truck shall be loaded to its measured capacity, when feasible. Trailers or trucks shall be equipped with tarp, spill guard, full mud flaps, positive lock, and sealed tailgates, and shall be washed on a regular basis. No trailer or truck shall leave the Plant if it leaks or is over the maximum allowable weight. It is the responsibility of the Service Provider and its on-site supervisor to coordinate loading with the Authority's truck dock personnel to see that trucks are not overloaded. Any truck over the maximum allowable weight shall be unloaded with a shovel; the Authority will not allow trucks to "shake" off partial loads.

Each truck shall have a tarp that completely covers its load. The tarp shall be vinyl; mesh or canvas tarps are not allowed. The tarp shall cover the entire top of the opening; no gap at front, back, or sides is allowed. The tarp shall be held down by fasteners that are attached at least every three (3) feet along the side of the body; likewise, fasteners must keep the tail end of the tarp fastened tight to the tailgate. A tarp system that is attached to bows that slide along cables mounted on each side of the dump body or trailer is allowed as long as the system closes tight at front and back and sides. Tarps shall cover the dump body or trailer at all times, even when empty. The Authority's odor control policy is "NO ODORS." The tarps shall only be removed when the truck is to be loaded and during loading. The truck tarp shall cover the trailer as soon as possible after loading.

Certain tarp systems are not usable in the loading dock; the Provider shall be aware of this condition and shall use only trucks with tarp systems that fit the scheme of the facility. The loading of the trucks will be accomplished from one (1), two (2), or three (3) overhead loading bins. The driver of the truck or the Provider's on-site supervisor may use a rake to help fill the truck evenly as trucks vary in length, and the overhead arrangement of the bins, in relation to the truck below, will vary slightly from truck to truck.

The Provider's tractor/trailers or trucks shall be weighed unloaded and loaded. Please see Section 3.4, Paragraph 12 (Documenting Tonnage for Invoicing) of this Article III for more detail about necessary paperwork and procedures during the loading process.

The Service Provider shall be aware that the PA DEP has a Waste Transportation Safety Program (Act 90) for owners and operators of waste transportation vehicles. The Service Provider shall comply with the requirements of the Waste Transportation Safety Program, the Permits, as well as all other Applicable Laws and Regulations pertaining to waste transportation. Service Providers must also comply with any comparable waste transportation requirements that are applicable in Ohio, including any waste transportation requirements of the OEPA. The Service Provider shall further comply with all Department of Transportation requirements for Pennsylvania and Ohio and any other applicable state.

The Authority shall have the right to examine the trucks and their tarp systems each time the Service Provider provides Services and shall have the right to require different trucks and/or tarp systems if the trucks and tarp systems do not meet the Authority's needs.

4. Scheduling

The Service Provider shall report daily to the Authority's Operations Department to coordinate the next day's trucking schedule at the Plant. Contact information will be provided by the Authority. The Authority's Operations Department will be as flexible as the good and orderly operation of the Plant will allow. The Service Provider shall normally operate and accept the Authority's Biosolids and Unlimed Solids from Monday through and including Friday. From time to time, as requested by the Authority's Operations Department, the Provider shall operate and accept Biosolids and Unlimed Solids on Saturdays and Sundays.

Typically, between six (6) and twelve (12) semi-truck loads shall be hauled by the Provider on any given scheduled hauling day. During certain conditions, as few as fifty (50) loads per month or as many as twenty-five (25) loads per day of Biosolids and/or Unlimed Solids, depending on truck size, shall be removed from the Plant as requested by the Authority's Operations Department. The Provider shall have a plan to handle small and large amounts of material during unexpected conditions, which should be summarized in the Provider's Proposal.

5. Beneficial Use Targets

The Service Provider shall determine at least one (1) Beneficial Use option for the Biosolids and Unlimed Solids and shall submit the corresponding Beneficial Use Target in the Proposal Pricing section of the Proposal Form set forth in Article II. A maximum of four (4) Beneficial Use options may be specified with corresponding Beneficial Use Targets. If more than one (1) Beneficial Use option is proposed, the aggregate percentage for all Beneficial Use options will be considered the guaranteed Beneficial Use Target. The Beneficial Use Target for each Beneficial Use option and the aggregate Beneficial Use Target as submitted by the Provider shall be set forth in the Service Agreement.

When setting such Beneficial Use Targets, the Service Provider should factor in conditions of the Authority's current Permits as discussed in Section 3.4, Paragraph 28 (PA General Permit and Ohio NPDES Permit) of this Article III. The Service Provider shall comply with all provisions of all applicable Permits and Applicable Laws and Regulations. The Service Provider shall also use good judgment and only select sites for Beneficial Use of the Biosolids, further processing of the Unlimed Solids for Beneficial Use, or disposal of the Biosolids and/or Unlimed Solids that are appropriately permitted, regulated, and operated to receive the Biosolids or Unlimed Solids. The Service Provider should also consider ALCOSAN specific

conditions stated in Section 3.4, Paragraph 10 (Beneficial Use Site Operations and Permitting) of this Article III and any other external factors deemed relevant.

The Service Provider shall provide enough detail in the Beneficial Use Work Plan described in Section 1.17 of Article I to justify and explain how the Beneficial Use Targets will be met during the term of the Service Agreement. At a minimum, the Service Provider should include the plan to address common project management challenges such as staff limitations and turnover, equipment breakdown, last minute changes to Beneficial Use locations, delays in Beneficial Use site approvals, bad weather, and pending test results.

The Service Provider shall pay the Authority a penalty in the amount of Fifteen Dollars ($15.00) per ton for every ton of Biosolids and Unlimed Solids below the aggregate Beneficial Use Target that is not beneficially used or sent for processing for Beneficial Use during the term of the Service Agreement, provided that such penalty shall not exceed Two Hundred Thousand Dollars ($200,000.00). Material not meeting minimum quality standards required under applicable Permits, pathogen reduction requirements, or vector attraction reduction requirements, or otherwise requested by ALCOSAN to be landfilled, will be excluded from penalty calculations. If the Service Provider's on-site personnel note any instance of highly odorous or extraordinarily wet material inappropriate for Beneficial Use and directs such material to landfilling, the Service Provider shall submit documentation to the Authority via email within two (2) business days and shall include such documentation with the Monthly Beneficial Use Report described in Section 3.4, Paragraph 22 (Monthly Beneficial Use and Hauling Reports) of this Article III. Such documentation shall be sufficient to confirm exclusion of such material from penalty calculations. Such penalty amount shall be determined as part of the Reconciliation discussed in Section 3.4, Paragraph 23 (Payment) of this Article III.

Additional terms and conditions specific to land application of Biosolids are set forth in Section 3.4, Paragraph 10 (Beneficial Use Site Operations and Permitting) of this Article III.6.

6. Permits, Approvals, Laws, Regulations

If the Service Provider intends to use ALCOSOIL in any process, or combine ALCOSOIL with any other material, the Provider must obtain the prior written approval of the Authority. The Provider must have provided information about these plans in its Proposal. The Provider shall obtain and comply with all necessary permits, certifications, and approvals for this process and the resulting combined material.

The Service Provider will fully comply with Applicable Laws and Regulations and the Permits, including the PA General Permit and the Ohio NPDES Permit, and other applicable Biosolids and Unlimed Solids management legal requirements. The Provider will ensure that all sites used for Beneficial Use or disposal of

Biosolids and Unlimed Solids are authorized by US EPA, PA DEP and/or OEPA and are in compliance with such authorizations. The Provider shall apply for, obtain, and comply with all necessary permits, licenses, and authorizations regarding the removal, transportation, storage, processing, Beneficial Use (as applicable), and disposal of Biosolids and Unlimed Solids as are required by all Applicable Laws and Regulations, and shall provide copies to the Authority. The Provider will use current forms and procedures for application submissions, reporting, and calculations, as mandated by applicable regulatory agencies. The Authority will reasonably cooperate and will share information as reasonably necessary to help the Provider obtain such permits, licenses, and authorizations.

The Service Provider is responsible for assisting the Authority in its renewal of the applicable Permits. The Authority shall not be responsible for monitoring the Service Provider's compliance with Applicable Laws and Regulations or applicable Permits. However, the Authority reserves its rights and the rights of its representative to inspect any Beneficial Use site and to immediately halt Beneficial Use operations should an inspection reveal compliance concerns.

The Service Provider will give the Authority copies of any training, permitting, analytical, transportation, land application, Beneficial Use, and/or disposal records upon request. The Provider will assist at the Authority's or any regulatory agency's site inspections upon request of the Authority.

The Provider will inform the Authority of any meetings with regulatory agencies that are related to ALCOSAN projects or the Service Agreement at least ten (10) calendar days prior to such a meeting (or within three (3) calendar days of scheduling such a meeting, if such meeting is scheduled to occur in a shorter period of time) so that a representative of the Authority may attend. The Provider will notify the Authority of any site inspections, correspondence, notices of violations, orders, or other threatened or actual enforcement actions by any Governmental Authority within one (1) calendar day of becoming aware of such events. The Provider will give the Authority copies of any documentation associated with these events within three (3) calendar days of receipt. The Provider will inform the Authority within three (3) calendar days of any submittals and/or correspondence to any Governmental Authority and provide the Authority with copies of these documents. Contact information will be provided by the Authority.

The Service Provider will comply with and cause its agents, employees, and subcontractors to comply with all Applicable Laws and Regulations and all applicable Permits that relate in any way to the Services being provided. The Provider shall protect and indemnify the Authority, its officers and agents against any claims or liability arising from or based upon violation of such Applicable Laws and Regulations or applicable Permits, whether by itself or its agents, employees, or subcontractors and will indemnify the Authority, in accordance with Article IX of the Service Agreement.

The Service Provider shall, throughout the term of the Service Agreement, keep itself fully informed of all Applicable Laws and Regulations and proposed laws, regulations, and other requirements that relate in any way to the Services being provided. If any discrepancy or inconsistency is discovered in the Agreement or included documents, the Provider shall report it to the Authority within three (3) calendar days of discovery. If the Service Provider identifies any instance of non-compliance, or potential non-compliance, with Applicable Laws and Regulations or the applicable Permits, the Provider shall report it to the Authority within twenty-four (24) hours of discovery. In turn, the Authority will inform the Provider of any irregularity or possible non-compliance promptly after its discovery due to a site inspection, review of Provider monthly reporting, or other event. The Provider will comply with all changes in the Permits and Applicable Laws and Regulations as they occur.

7. Ownership

The Provider shall be responsible for transportation of Biosolids and Unlimed Solids to designated destinations. The Biosolids and Unlimed Solids become the property of the Service Provider once loaded into the Provider's trucks and shall thereupon no longer be the responsibility of the Authority, subject to the Authority's right to redirect the Provider's transportation of Biosolids from Beneficial Use sites to landfills if, in the Authority's judgment, such redirection is required to ensure compliance with Applicable Laws and Regulations and applicable Permits. The Provider shall be responsible for site selection for Beneficial Use and disposal (as applicable) of Biosolids and Unlimed Solids, and the Provider shall have sole responsibility for the disposition of the Biosolids and Unlimed Solids, including compliance with Applicable Laws and Regulations and the applicable Permits, and for any and all liabilities, damages, or injuries caused thereby, including liabilities arising under Applicable Laws and Regulations, including CERCLA and any similar state laws. The Provider shall indemnify, defend, and hold the Authority harmless from all such liabilities, damages, or injuries in accordance with Article IX of the Service Agreement. The Provider shall not commingle the Authority's Biosolids or Unlimed Solids with any other biosolids, sludge, or other material unless appropriate regulatory approvals are granted, and the prior written approval of the Authority is obtained.

8. Educational Outreach

The Service Provider shall maintain good public relations at whatever sites are used and shall assist the Authority with its educational outreach and public awareness program. The Provider shall provide public education regarding Biosolids and Unlimed Solids as necessary for its operations, including speaking with the media if requested by the Authority. The Authority will provide brochures and other public relations material to assist the Provider in this work. The Provider shall promote the use of the Authority's product as "ALCOSOIL." If, with the Authority's prior written approval, the Provider processes the Biosolids or Unlimed

Solids further under a name chosen by the Provider or its subcontractor, the Provider will notify the Authority of such name and circumstances.

The Service Provider shall provide public relations and media training for all personnel, including truck drivers. The Service Provider shall require every truck driver, including subcontracted drivers, to attend a session in which the drivers shall be informed about the Authority, Biosolids, and Unlimed Solids, and the Authority's Beneficial Use program. For the time period set forth in Article X, Paragraph E, of the Service Agreement, the Service Provider shall keep records of the content, date, and attendees for each such session and shall provide such records to the Authority.

9. Disposal/Landfills

The Service Provider shall provide with the Proposal Documents the Disposal Plan as requested in Section 1.17 of Article I. The Service Provider shall consider daily and annual site-specific landfill limitations for Biosolids and Unlimed Solids as part of its pricing and work plan. The Authority expects the Provider to seek agreements with more than one landfill management company, as landfill acceptance policies may change frequently. The Authority often hauls material to Imperial and Monroeville Landfills and can sometimes exhaust the maximum daily tonnage accepted by those landfills. The Service Provider should take note that certain landfills will accept Unlimed Solids

The Provider shall provide with the Proposal Documents a list of landfills under pending contractual arrangements, and the specific daily capacities of such landfills that can be used for the Services, as well as backup landfills and other methods of disposal available to the Provider. If no Beneficial Use options are available or permitted, the Provider is expected to dispose of the loads requested by the Authority and should secure enough landfill agreements to satisfy this requirement.

ALCOSAN has waste profiles for Biosolids and Unlimed Solids set up at several local landfills. Appendix E hereto contains a list of landfills for which waste characterizations have been completed by the Authority. The Service Provider shall have sole responsibility for finding sufficient disposal and/or landfill space. The Service Provider shall have outlets with enough capacity to receive this material, even during emergency conditions at the Authority. Should the Service Provider need additional landfills beyond those listed in Appendix E, the Service Provider should complete any necessary forms and other documentation for the Authority's review and signature as generator. The Authority can provide to the Service Provider its most recent analytical data for the Biosolids and Unlimed Solids as indicated in Section 3.4, Paragraph 13 (Sampling and Analysis) of this Article III to assist the Service Provider with disposal agreements. However, any additional or more frequent testing is the responsibility of the Service Provider.

As part of Act 101 of 1988, the Municipal Waste Planning, Recycling, and Waste Reduction Act, Allegheny County maintains a Solid Waste Management Plan. All waste generated within Allegheny County must be disposed of at landfills within this Plan. As such, landfills intended to be used as part of the Service Agreement must either be in the Plan or the Service Provider must add the landfill to the Plan, following Allegheny County's procedures.

The Provider will resolve all disputes with any disposal facility without the participation of the Authority. All disposal/landfill site operations shall be carried out in accordance with all Applicable Laws and Regulations and in cooperation with the landfill operator and other affected parties. The Provider will ensure operations comply with all requirements of the Permits, including sampling, monitoring, training, site restrictions, reporting, recordkeeping, signage, spill notification, and any testing not performed by the Authority, as listed on Appendix F. The Provider will maintain sufficient records to demonstrate compliance with all requirements for the time period set forth in Article X, Paragraph E of the Service Agreement.

10. Beneficial Use Site Operations and Permitting

Enough Beneficial Use sites shall be permitted and available for all Biosolids and Unlimed Solids provided by the Authority and to meet or exceed applicable Beneficial Use Target(s). The Authority strongly encourages diversification and varied site ownership within approved Beneficial Use options to allow for achieving the greatest Beneficial Use percentages possible; such options include, without limitation, agricultural land application, site reclamation, tree-trenching, and transfer to other permittees for further processing. The Service Provider shall provide sufficient outlets for Beneficial Use, as well as obtain the necessary Permits and approvals from the applicable Governmental Authorities. The Authority is not opposed to the possibility of seeking a permit for a regional storage facility to increase opportunities for Beneficial Use.

All permit applications, authorizations, notifications, and similar requests for site approvals shall be completed by the Service Provider and submitted to the Authority for review, additional signatures (as applicable), and assignment of unique names consistent with the Authority's naming system prior to submission to Governmental Authorities for approval. Such submissions shall be color copies provided in an electronic format, preferably as one (1) single pdf document. Any maps must be clear and legible when printed and copied and, at a minimum, shall be identified with a title, legend, north arrow, and scale. Map credits indicating source and date of data used are preferred. Delay in obtaining required ALCOSAN signatures is not an acceptable excuse for failing to meet Beneficial Use Targets.

The Service Provider shall notify the Authority at least fourteen (14) calendar days in advance of taking Biosolids or Unlimed Solids to a new Beneficial Use site not previously utilized by the Authority. The Service Provider is responsible for

ensuring, and documenting to the Authority, that the Beneficial Use site (1) has the requisite organization, personnel, capital, plant, equipment, ability, training, certification, licenses, authorizations, permits, and experience to satisfactorily manage the Biosolids and Unlimed Solids, (2) has all applicable Permits to accept and manage Biosolids and Unlimed Solids, and (3) is in material compliance with Applicable Laws and Regulations and the applicable Permits.

Prior to commencing land application or other Beneficial Use operations (including further processing for Beneficial Use), the Service Provider shall arrange a pre-operations site meeting for each Beneficial Use site directly with the facility owner or landowner (or their designated representative) to coordinate and facilitate smooth operations. The Service Provider shall provide the Authority with at least two (2) business days' prior notice of the scheduled time and place of such meetings so that Authority personnel may attend.

All Beneficial Use site operations shall be carried out in accordance with all Applicable Laws and Regulations and all applicable Permits and in cooperation with the Beneficial Use site landowner or facility owner, operating agricultural producer, mine owner and/or operator, and other affected parties. The Provider will ensure operations comply with all requirements of the Permits and will maintain sufficient records to demonstrate compliance with all requirements, for the time period set forth in Article X, Paragraph E of the Service Agreement.

All equipment selection and application methods, as well as timing of Beneficial Use, shall be conducted in compliance with the Permits and Applicable Laws and Regulations and so as not to adversely impact either the normal agricultural management practices or other operations of the facility, site, its adjacent landowners, or any environmentally sensitive area, including streams and wetlands.

Beneficial Use operations shall be completed within as concise a timeframe as possible. Authority personnel will inspect equipment, methods, reports, and sites, as they deem necessary. The Provider will notify the Residuals Department of the Authority within twenty-four (24) hours of becoming aware of a need for any provisional or strategical changes to proposed or designated operational Beneficial Use site(s).

The Service Provider shall inform the Authority about any potential compliance issues, regulatory requirements, site problems, landowner concerns, and nearby neighbor complaints/issues within twenty-four (24) hours of becoming aware of such issues and shall furnish any documentation relating to these issues to the Authority within two (2) business days of receipt. The Service Provider shall also include such documentation in the Monthly Beneficial Use and Hauling Reports referenced in Section 3.4, Paragraph 22 (Monthly Beneficial Use and Hauling Reports) of this Article III. Contact information will be provided by the Authority.

For any Beneficial Use method, the Service Provider shall give the Authority representative all landowner, site owner, and facility owner information so that the

Authority representative may contact the landowners, site owners, or facility owners and perform inspections.

The Proposal Prices for the Services set forth in the Proposal Form shall take into account various landowner concerns, as applicable to the particular Beneficial Use method. Such concerns may include but are not limited to the maintenance of access roads on the property (including providing gravel), the spreading of material less than the agricultural need of the crop, the placement of runoff controls as needed, (such as hay bales or silt fencing around staging/storage areas), the leveling of all dirt berms, and the post-operations impacts on staging/storage areas. The Provider shall in all cases leave all ground and roads in a condition at least as good as their original condition. The Provider will resolve all complaints by or disputes with any landowner without the participation of the Authority.

Any public materials prepared by the Service Provider that promote the Authority's Biosolids shall be professional in nature. The Authority reserves the right to inspect and approve or disapprove proposed materials before they are utilized by the Service Provider.

Additional Considerations for Land Application

If land application or land reclamation, including tree-trenching, is being utilized as a Beneficial Use option, the Service Provider shall secure a sufficient quantity of suitable land, gain approval from landowners, provide any required landowner notifications (including adjacent landowners, when required), and fulfill any other responsibilities under Applicable Laws and Regulations or applicable Permits. These responsibilities include but are not limited to complying with all analytical and other monitoring requirements, complying with all recordkeeping and reporting requirements, calculating agronomic rates using current formulas and formats required by applicable regulatory agencies, soil sampling and providing the Authority with the results of all analyses, pre-operation calculations, mapping with stockpile locations, equipment calibrations, and packets for drivers and land appliers concerning any site. The Provider shall also provide results of all soil tests concerning the land application site to the landowner/farm operator when requested or required by Applicable Laws and Regulations.

The Provider staff performing spreading services must follow guidelines referenced in Section 3.4, Paragraph 16 (Project Personnel) of this Article III.

Prior to the execution of the Service Agreement, the Authority will supply the Service Provider with records of all of Beneficial Use sites that are known to have been previously used by the Authority. The Service Provider is responsible for verifying that all site information is correct and up to date for sites that will be utilized, including but not limited to timely soil sampling with required composite samples, changes to usable acreage, buffer areas, landowner consents, agricultural operation management techniques or infrastructure (such as tile drains, developed

wells, or springs), investigation of site watershed for connectivity to waters of the state, and updated Web Soil Survey information. Any updates or corrections will be promptly provided to the Authority.

Outdoor signs must meet requirements of applicable Permits and Applicable Laws and Regulations regarding language and dimensions and shall be made from corrugated plastic or equivalent materials that are waterproof and rigid. The Authority reserves the right to inspect and approve or disapprove proposed materials before they are utilized.

Land application spreading of Biosolids will normally be done during the daylight hours, from dawn to dusk, except during extraordinary circumstances, in which case the Authority will be promptly notified.

No more than 20,000 dry tons of Biosolids shall be land-applied in Ohio each permit year, as indicated in the Authority's NPDES Permit issued by Ohio EPA set forth on Appendix D. The Authority desires the Service Provider to land-apply Biosolids in a manner that minimizes the duration of storage, due to the potential for nuisance odor complaints and stormwater problems. Even though state regulations may allow for longer term storage, the Provider should not assume that all permitted acreage is appropriate for field storage. In all cases, the then-applicable Permit conditions must be followed.

The Service Provider shall submit a Field Storage Plan with the Proposal demonstrating how stored material is proposed to be handled. The Field Storage Plan shall include, at a minimum, the following:

a. Process for tracking regulatory storage limitations for time and tonnage, including example logs, database reports, or equivalent.

b. Specific criteria (such as distance to nearest house, population density, topography, soil type, and road access) that will determine whether a site can be used for storage and a description of how these criteria will be applied (such as weighted criteria, basic checklist, decision matrix, etc.).

c. Expected storage months, absolute maximum tons, and absolute maximum number of consecutive and non-consecutive storage days the Provider considers acceptable. Specifics may not be known for individual sites prior to award, but a statement shall be provided as to whether the Provider plans to follow regulatory allowances or intends to take a more conservative approach to storage methods when deemed advisable and/or conditions dictate.

d. Description of best management practices that the Provider will implement and the equipment to be used for stored material to minimize odors and reduce stormwater runoff. Indicate whether different practices will be

employed based on duration of storage such that more controls will be implemented for longer storage periods, and, if so:

(i) Include a contingency plan for on-site odor development and pooling prevention with expected timing of implementation.
(ii) Describe logistical steps available to the Provider to apply oldest material as quickly as possible or other means of addressing odorous material before or at the time of land application.

e. Process to conduct and document odor checks that shall include frequency, locations (on-site versus distance downwind), person(s) conducting checks, and efforts to minimize subjectivity of assessments and documentation (such as standardized forms, training, or sensors).

f. Identification of conditions that may warrant the retrieval of stored loads for disposal or further processing, and description of the decision-making criteria for taking such action.

g. If Biosolids are planned to be stored at the same site with material from multiple generators, description of how Biosolids will be separated in storage from other generators' material. If odors arise that could result in a complaint or violation issued against the Authority, description of process for identifying odor source among multiple generators.

h. If regional storage is planned, address, name, and regulatory permit number of each regional storage facility.

In the event stored material causes malodor while on site due to the duration of storage, thus resulting in the retrieval and landfilling of such material, the tonnage weight of such material shall not be counted toward the Provider's Beneficial Use Target, even if such material otherwise meets quality standards under Applicable Laws and Regulations and applicable Permits.

The Service Provider shall have full responsibility to beneficially use material hauled and stored by the Service Provider even if the Service Agreement expires or terminates. All documentation of timely and proper Beneficial Use of stored Biosolids shall be supplied to the Authority no later than thirty (30) days after Beneficial Use thereof, or as required by Applicable Laws and Regulations or applicable Permits, whichever is sooner. Field storage limitations are not an acceptable excuse for failing to meet Beneficial Use Targets.

Additional Considerations for Transfers to Other Permittees

If a Beneficial Use option other than agricultural land application is being utilized, the Service Provider shall secure sufficient approvals and commitments from appropriate sites and facilities and shall fulfill any other requirements under

Applicable Laws and Regulations and applicable Permits. These requirements may include, without limitation, complying with all analytical and other monitoring requirements, complying with all recordkeeping and reporting requirements, and collecting and characterizing samples. The Service Provider shall provide the Authority with documentation confirming that all necessary requirements have been fulfilled prior to taking any Biosolids or Unlimed Solids to the proposed Beneficial Use site or facility. In the event the site or facility has not been previously used by the Authority, the Provider shall notify the Authority fourteen (14) days in advance of the proposed delivery.

Prior to the delivery of the Authority's Biosolids or Unlimed Solids to any site or facility to be further processed or combined with any other material, the Service Provider shall obtain the Authority's prior written consent and whatever permits and/or authorizations are necessary for use of the resulting material, as applicable. The Service Provider shall have a marketing plan for this material and outlets with enough capacity to receive and use this material, even during emergency conditions at the Authority.

11. Spill Prevention, Control, and Cleanup

The Service Provider shall provide the Authority with a final Spill Prevention and Control Plan with the Proposal Documents. In addition to the specific actions identified below, the Plan will describe actions for mitigating nuisances, responding to releases and emergency situations, and any other actions necessary to perform the Services. At a minimum, this Plan shall meet the requirements of all Applicable Laws and Regulations and the applicable Permits. The Provider shall implement the Plan and update it as necessary. The Plan shall include the names, addresses, telephone numbers, and contact personnel of the firm(s) on a retainer with the Provider that will be contacted by the Provider to clean up a spill. This contact information will be kept current.

The Service Provider's "on-site supervisor" shall have this Plan and shall have the authority to initiate a spill cleanup and contract with a qualified response company, as needed. A copy of the Spill Prevention and Control Plan shall be carried by all drivers at all times and shall be produced upon demand. Drivers shall carry all safety equipment and documentation required by Applicable Laws and Regulations.

a. SPILL PREVENTION – At a minimum, the Provider shall take the following actions:

(i) Ensure truck drivers watch truck/trailer continuously while loading and do not overload.
(ii) Ensure truck/trailer hatches/tailgates are closed and latched while transporting.
(iii) Inspect truck/trailer seals daily and replace as necessary.

(iv) Ensure tarps are in place while transporting, and operating empty.

(v) Ensure unloading operations are conducted to minimize potential run-off or tracking.

(vi) Ensure that all of the external parts of trucks/trailers are thoroughly washed free of Biosolids and Unlimed Solids prior to leaving the Plant, landfills, and other sites.

b. SPILL PREPARATION – At a minimum, the Provider shall take the following actions to be prepared should a spill occur:

(i) Have access to all necessary cleanup and containment equipment at the Plant, the landfill, any site, and in the vehicles hauling Biosolids and Unlimed Solids.

(ii) Ensure that an emergency/spill response coordinator is always designated and that all personnel are aware that this person should be contacted in event of a spill or emergency.

(iii) Ensure all providers, managers, operators, and field personnel are knowledgeable in spill control procedures.

(iv) Have local providers with spill response equipment on twenty-four (24) hour/seven (7) day per week standby.

(v) Ensure all project personnel have a listing of all required emergency contact people, including internal emergency response team members, Authority personnel, and applicable Governmental Authorities and emergency personnel.

(vi) Have an inventory on hand of cleanup materials, such as straw bales, booms, sorbent, etc. in trucks, trailers, and at Beneficial Use sites, etc., and on hand during loading and unloading.

c. SPILL CONTROL - At a minimum, in the event of a spill, the Provider shall take the following actions immediately, to the extent it is safe to do so:

(i) Halt the source of the spill: e.g., ruptured truck body or tailgate.

(ii) Contain the spill: use straw bales, booms, sorbent, etc. to form a barrier.

(iii) Clean Up: clean up by placement of straw bales, booms, sorbent, etc. in position to contain and soak up and/or collect material. Pick up spill containment materials and Biosolids and Unlimed Solids either mechanically or manually and dispose in approved manner.

(iv) Final Cleanup: ensure that roadways are free of Biosolids and Unlimed Solids and associated debris. In the event a spill occurs on private property, cleanup should be completed immediately, with restoration to the satisfaction of the owner.

(v) Management of cleanup areas: the Provider will take immediate charge and initiate cleanup activities. The Provider shall also

communicate with the public on the scene, answering questions and advising of cleanup activities.

(vi) Reporting: the Authority will be notified immediately of any spills, and contact information will be provided by the Authority. Applicable police and/or other emergency response personnel and Governmental Authorities will be notified as necessary or as required by law. Within twenty-four (24) hours of a spill, the Provider will provide the Authority with a written report of how the spill occurred and the action taken. Within fourteen (14) days, a follow-up report will be submitted to the Authority. Federal, state and/or local emergency response agencies will be notified and sent written reports as required by Applicable Laws and Regulations or applicable Permits. Copies of all such correspondence will be given to the Authority for review prior to submission to Governmental Authorities.

12. Document Tonnage for Invoicing

The tonnage of Biosolids and Unlimed Solids delivered to the Service Provider will be the wet tonnage as measured by the Authority's Weigh Scale. The Weigh Scale will generate a trip ticket for each truck load, regardless of whether the truck load is going for disposal or Beneficial Use. The trip ticket will be filled out to include the following information: Truck identification number, date, time of day, product name, tare/gross/net load weights, and load destination. This ticket is to be signed by both the driver and a designated member of the Plant operating staff. The original and a copy of the ticket will go to the driver, and a copy of the ticket will go to the Plant. The driver will have his/her original and copy of the ticket signed by the Beneficial Use site representative.

In addition to the trip ticket, official manifests obtained by the Provider must accompany all loads hauled to authorized landfills. All fields of the manifest must be completed, and the manifest must be signed by all parties.

One copy of the trip ticket from ALCOSAN and all manifests (properly completed and signed) must be returned to the Authority, or payment will not be made for that load. Any weigh tickets generated by the landfill, land application site, land reclamation site, tree-trenching site, processing facility, or other Beneficial Use site shall also be given to the Authority. The supporting documentation for monthly invoices shall be in accordance with the Service Agreement and Section 3.4, Paragraph 23 (Payment) of this Article III.

The Service Provider is responsible for compiling a daily report that is a permanent record and serves as a source of tonnage information for compilation into monthly reports as outlined further in Section 3.4, Paragraph 21 (Daily Reports) and Paragraph 22 (Monthly Beneficial Use and Hauling Reports) of this Article III.

13. Sampling and Analysis

The Authority will sample its Biosolids and Unlimed Solids as required by Applicable Laws and Regulations and applicable Permits. All analytical work completed by the Authority will be submitted to the Service Provider as necessary or requested. Appendix F hereto lists all testing completed by the Authority.

The Provider shall perform all sampling and analyses of the Biosolids and Unlimed Solids that are not already being performed by the Authority, as referenced in Appendix F, as well as all sampling and analyses of soil, groundwater, surface water, and air, as required by any Governmental Authority, Applicable Laws or Regulations, or applicable Permits for any Beneficial Use or disposal activities. Proper sample collection, preservation, and handling techniques recommended by regulatory agencies must be followed.

The Authority recommends that the Service Provider use a PADEP accredited laboratory for these analyses, and, if the Provider beneficially uses ALCOSOIL within the Commonwealth of Pennsylvania, this is a legal requirement.

The Service Provider's Beneficial Use Work Plan submitted with the Proposal Documents shall contain a sampling plan for any portion of the Services as to which sampling will be conducted, regardless of whether such Services are being conducted by the Provider or a subcontractor. At a minimum, the sampling plan shall contain the following information:

a. How sampling methodology will ensure results will be representative of the soil or Biosolids or other material being characterized;

b. How sample locations from various sites or site locations will be documented so samples can be traced;

c. Sample collection and composition procedures including any preservation and equipment used;

d. How cross contamination will be avoided;

e. Chain of custody procedures that are legally enforceable; and

f. If there are any associated regulatory limits, how material is managed if results are higher than limits.

14. Insurance Coverage

The Service Provider shall purchase and maintain the insurance required by these Proposal Documents, listed below and in the Service Agreement, from insurance companies that are duly licensed or authorized in the Commonwealth of

Pennsylvania for the issuance of insurance policies for the limits and coverages so required. Such insurance companies shall also meet such additional requirements and qualifications as are provided in these Proposal Documents and described below.

All coverage shall be without voluntary deductibles, and if the insurance contains deductibles, the Service Provider shall pay all costs and expenses not covered because of such deductibles. All insurance shall be on an occurrence basis, unless otherwise noted by the Service Provider. Any such notations must be called to the Authority's attention in a letter attachment.

The Service Provider shall provide Certificates of Insurance evidencing the required insurance to the Authority' representative prior to commencing the work of the Service Agreement and this Scope of Services. The Authority shall be named as an additional insured and shall be notified prior to cancellation. Each certificate shall be signed by a person authorized by the insurer to bind coverage on its behalf as described in the certificate. Each certificate shall, in addition to the insurance coverage, contain the following:

a. Inception and expiration dates of insurance policy(ies);

b. Limits of Liability;

c. Nature of coverage(s) provided including special hazards, if required;

d. Name(s) of insurance company(ies);

e. Policy numbers(s);

f. Notation of deductible and self-insurance retention applicable to any contract of insurance;

g. Notation of policy endorsement that provides for thirty (30) calendar days prior written notice to the owner and the Authority in the event of change, cancellation or renewal;

h. Underlying insurance requirements for excess liability contracts; and

i. A list of exclusions, if any.

The Authority will accept no certificate that exculpates the insurer or reduces any right conferred on the Authority by the above certificates, nor will the Authority accept certificates unless the certificates bear the signature of a direct representative of the insurance company authorized to do business in Pennsylvania.

The Service Provider shall furnish a certificate of renewal or extension of any policy that is scheduled to expire during the term of the Service Agreement thirty (30) calendar days prior to the scheduled expiration date of the policy.

The Service Provider shall deliver to the Authority a certified copy of each policy required hereunder, as well as a copy of the endorsement adding additional insureds hereunder (on 150 Form B for general liability coverage) as well as a listing of all policy exclusions different from the standard for CG 00 01 prior to beginning the work under the Agreement.

The Service Provider shall provide the following coverage:

a. Workers' Compensation Insurance to apply to all of the Provider's employees, subcontractors, suppliers, or anyone employed directly or indirectly by them in compliance with, and in the limits prescribed by, the "Workers' Compensation Law" of the Commonwealth of Pennsylvania and all applicable federal laws. Such Workers' Compensation Insurance shall be endorsed to provide for a waiver of subrogation against the Authority.

b. Commercial General Liability with a limit of not less than Two Million Dollars ($2,000,000) per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability, plus excess umbrella protection up to Five Million Dollars ($5,000,000) for the same. Such coverage shall include:

   (i) Premises and/or Operations;
   (ii) Independent Providers;
   (iii) Products and Completed Operations;
   (iv) Broad Form Property Damage; and
   (v) Contractual Coverage Applicable to this specific Agreement.

c. Business Automobile Liability with a limit of not less than One Million Dollars ($1,000,000) per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability plus excess liability umbrella protection described in subparagraph (b) above. Such coverage shall include:

   (i) Owned Vehicles;
   (ii) Hired and Non-Owned Vehicles;
   (iii) Employers' Non-Ownership; and
   (iv) Pollution Liability - Broadened Coverage for Covered Auto's Endorsement (ISO form CA 99 48).

d. Pollution Legal Liability Coverage shall be Third Party Pollution Liability, and the Service Provider shall provide a copy of the insurance contract, and it shall be applicable to all risk and all locations. Coverage shall be maintained in an amount of at least Two Million Dollars ($2,000,000) per

loss, with an annual aggregate of Five Million Dollars ($5,000,000). This insurance shall be maintained in force for the duration of the Service Agreement and any extensions thereto; all costs to be in connection with any loss arising from the insured facility and work of the Service Agreement. If this coverage is written on a claims-made basis, the Service Provider warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the Service Agreement; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of eighteen (18) months beginning from the time that work under the Service Agreement is completed. Coverage shall apply to sudden and non-sudden pollution conditions resulting from the escape or release of Biosolids and Unlimed Solids, smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids, or gases, waste materials, or other irritants, contaminants, or pollutants. Coverage shall be placed with an insurer acceptable to the Authority. This coverage shall be applicable to:

(i) Bodily Injury;
(ii) Property Damage, including loss of use of damaged property or of property that has not been physically injured or destroyed;
(iii) Cleanup Costs; and
(iv) Defense, including costs and expenses incurred in the investigation, defense, or settlement of claims.

15. Interruptions in Service and Penalties

Any interruption in the Service Provider's operations shall be reported to the Authority immediately. Except during Force Majeure events, if the Authority has to use/dispose of any current production of Biosolids and Unlimed Solids because the Provider fails to remove Biosolids and Unlimed Solids as scheduled, the Provider shall be liable for all costs, losses, and damages incurred by the Authority in the use/disposal of that material.

16. Project Personnel

The Service Provider shall provide a personnel chart for all individuals involved in providing the Services, showing who reports to whom, their detailed project responsibilities, resumes, professional membership associations, contact information, and approximate percentage of their time to be dedicated to providing the Services. At a minimum, the resumes shall include name, title, education, experience, and years with the Provider's organization. For unfilled positions, the Provider shall provide the formal job descriptions used for recruitment in lieu of resumes. The Authority will consider the relative experience of personnel when evaluating Proposals, so this information should be sufficiently detailed to provide the Authority with a clear understanding of responsibilities and qualifications of all personnel involved in performing the Services.

The Service Provider and its subcontractors shall have as many personnel as is necessary to transport, timely process, and beneficially use the amount of Biosolids and Unlimed Solids supplied by the Plant, even during periods of heavy hauling. The Authority strongly encourages the availability of back-up staff during staff transitions or unexpected absences, and this availability should be noted in the Proposal Documents. The Provider shall ensure that all personnel involved in providing the Services have the required training, licenses, and certifications necessary to perform this work as described in this Scope of Services and as required under Applicable Laws and Regulations and the applicable Permits.

The Service Provider shall identify in the Proposal Documents at least one (1) person who will perform the following minimum responsibilities, provided that a single person may perform more than one (1) of these roles (for example, the project manager may also fulfill the responsibilities of the field supervisor):

a. Project Manager: The project manager will be the main point of contact for routine project questions and information, will schedule weekly meetings with the Authority's Residuals Department, and will coordinate with other Service Provider personnel to provide quality service.

b. Project Director: The project director will be a less frequent contact person but will be responsible for overall project oversight, high level decision making, brainstorming solutions, and addressing contractual concerns.

c. Field Supervisor (for each land application site, including each tree-trenching site): Field supervisors will oversee all aspects of site-specific Beneficial Use to ensure all compliance standards are met, will have full knowledge of the Beneficial Use status at the site, and will coordinate Beneficial Use logistics and other required monitoring or sampling. Field supervisors shall be prepared to conduct field surveys with regulatory personnel, shall be knowledgeable of Applicable Laws and Regulations and Permit requirements, and shall have extensive experience with Biosolids and Unlimed Solids operations in whatever Beneficial Use option is utilized by the Provider. Field supervisors shall be available to advise other field personnel and/or trucking personnel at a minimum by telephone but preferably in person at the site during unloading and spreading operations.

d. Field Applicator/Spreader/Operator: The field applicator/spreader/operator will be responsible for day-to-day handling and application of Biosolids. These individuals will demonstrate a full understanding of the critical nature of following directives necessary for proper application, including map reading, safely operating heavy equipment, and assessing field and crop conditions. A field applicator will not typically perform field supervisor duties unless their training and experience allows for such dual roles.

e. Technical Beneficial Use Staff: Technical Beneficial Use staff will be dedicated to acquiring and maintaining Beneficial Use sites, working up and submitting permit applications, tracking applications through regulatory agencies, calculating agronomic rates, and reviewing all information and records necessary for reporting to the Authority and to all applicable Governmental Authorities. These personnel shall have university training in an agricultural, forestry, or other appropriate discipline, or an equivalent combination of education and experience to ensure compliance with Beneficial Use requirements and proper reporting to ALCOSAN.

f. Truck Drivers: Truck drivers will remove the Biosolids and Unlimed Solids from the Authority. Drivers will be knowledgeable of Department of Transportation rules and regulations, roadside safety, spill prevention and response, and proper unloading at the Beneficial Use site or processing facility.

g. On-site Supervisor: The on-site supervisor will be located at the Plant and will oversee the loading and hauling operation. The on-site supervisor will be present at the Authority's truck loading dock from the time the Provider's first truck pulls into the Plant to receive its load until the Provider's last truck pulls out loaded. If any event occurs that affects the Biosolids and Unlimed Solids operation, the Plant Operations staff must be able to contact the on-site supervisor "on-site." A truck driver(s) shall not serve as the on-site supervisor. The on-site supervisor shall not be absent from the Plant, nor shall the on-site supervisor work on other client's projects while at the Plant. The on-site supervisor shall have the authority and ability to schedule the trucks, obtain additional trucks, divert trucks and their loads from a Beneficial Use option to a disposal option, and make decisions as necessary to remove Biosolids and Unlimed Solids as scheduled by the Authority's Operations Department. The Service Provider shall provide a suitable office trailer with the appropriate equipment and facilities for the on-site supervisor to perform their responsibilities at the Plant.

h. Public Relations Representative: The public relations representative will speak with farmers and other users of Biosolids and Unlimed Solids, will meet with individual complainants, will address concerns at public meetings, and will manage the activities described in Section 3.4, Paragraph 8 (Educational Outreach) of this Article III.

i. Emergency Manager: The emergency manager will be in charge and available on a twenty-four (24) hour basis to make management decisions for the Provider concerning the Services and to address spill, release, or emergency situations. The emergency manager shall have the necessary authority to schedule or reschedule the deployment of the necessary personnel and resources required to perform the Services. The Provider shall ensure that the Authority always has the name and contact information for the emergency manager.

j. Support Personnel: The Provider's support personnel will track, study, and comment on Applicable Laws and Regulations proposed by the various Governmental Authorities, will develop educational materials about Beneficial Use of Biosolids and Unlimed Solids for public meetings and general distribution, will make presentations at public meetings, government agency meetings, and local government meetings, and will be active in the professional associations relating to Biosolids and Unlimed Solids management. The Provider shall report to the Authority on a monthly basis on the activities of the support personnel related to the regulatory and legal obligations of the Authority as a generator of Biosolids and Unlimed Solids, and with respect to the Authority's public image as a generator of Biosolids and Unlimed Solids.

k. Legal Services: Provider's in-house legal staff or outside counsel will handle the various legal and regulatory matters that may arise relating to the Services.

All persons involved with land application or tree-trenching Beneficial Use, including without limitation, field supervisors, field applicators / spreaders / operators and other field staff, shall be the Provider's personnel or persons directly remunerated by the Provider by subcontract or otherwise, shall be well-versed in the applicable Beneficial Use application, and shall understand all the regulatory aspects of their respective positions under Applicable Laws and Regulations and the applicable Permits. All such personnel shall report to, be employed by, and be under the supervision and control of the Provider or the Provider's subcontractors. Under no circumstances shall the landowner, farm operator, or other third party have the ability or authority to direct or control the activities of such personnel.

The Service Provider shall provide the Authority with the names and contact information of all personnel (including subcontractors) that are providing Services, as required above, and shall keep this information current during the term of the Service Agreement. The Provider shall update the Authority within two (2) business days of any changes to this information. The Authority will provide the Provider with similar information for Plant personnel involved in the Services.

17. Subcontractors

The Service Provider shall describe in detail in the Proposal Documents any portion or aspect of the Services with respect to which the Service Provider intends to enter into one (1) or more subcontracts. The Service Provider shall identify each such subcontractor and shall provide the information required by Section 3.4, Paragraph 16 (Project Personnel) of this Article III, for each such subcontractor.

If the Service Provider intends to enter into a subcontract for any Beneficial Use involving any process to further treat the Biosolids or Unlimed Solids, the Service Provider shall confirm that the processing facility has the requisite organization,

personnel, capital, plant, equipment, ability, training, certification, licenses, authorizations, permits and experience to perform the Services in accordance with the provisions of the Service Agreement, is in material compliance with Applicable Laws and Regulations, and has the requisite personnel in adequate numbers and with the appropriate professional experience and training to perform such processing. The Service Provider shall also provide the information required in Exhibit D attached to the Proposal Form set forth in Article II for each such subcontractor.

18. Health and Safety

The Service Provider shall be familiar with and comply with the Permits and all Applicable Laws and Regulations of any Governmental Authority having jurisdiction for safety of persons or property or to protect them from damage, injury, or loss. The Provider shall have in place, a written Health and Safety Plan. Any updates to the Health and Safety Plan shall be submitted to the Authority for its review before the Provider begins work. The Provider shall initiate, maintain, and supervise all safety precautions and programs in connection with performing the Services. The Provider agrees to take reasonable and necessary precautions to prevent injury to persons, property, and equipment, and shall be solely responsible for the implementation and enforcement of the written Health and Safety Plan. If proper safety measures are not being taken or the Services are being performed in an unsafe manner, the Authority may take any or all of the following actions:

a. Require the work be stopped.

b. Notify the Provider's insurance carrier of the safety violation.

c. Withhold part or all of a current invoice.

d. Require removal of the Provider's employee responsible for the safety violation.

The Service Provider shall not make a claim for any damages or request payment of any costs incurred by work stopped because of unsafe work practices or safety conditions.

The Service Provider shall provide appropriate training and Personal Protective Equipment (PPE) (e.g., safety glasses, hard hats, chemical resistant gloves) that meets OSHA and any applicable state standards to its employees as warranted by the nature of the work; the Provider shall see that any of its subcontractors provide training and PPE that meet OSHA standards to their employees. Training will be updated yearly or as otherwise required by Applicable Law and Regulations or applicable Permits.

The Service Provider will notify the Authority of any complaints, regulatory inspections, notices of violation, citations or other notifications of potential or actual health or safety issues within twenty-four (24) hours of notification. The Provider will provide the Authority with any written documentation within three (3) days of receipt.

Gasoline and other flammable materials shall be dispensed from containers of approved design (National Fire Protection Association, Underwriters Laboratory, OSHA, etc.).

The Services being provided involve possible contact with sludge and lime. The Provider is required to inform its employees and employees of its subcontractors of the hazards inherent in the handling of these materials. The Provider shall inform its employees about and require these employees to practice good personal hygiene, avoid contact of open wounds with these materials, and use the proper PPE to avoid infection or chemical contact.

The Provider shall maintain clean work areas at all times at the Plant, at the Provider's sites, and at the Beneficial Use sites. The Provider shall ensure that all its personnel and personnel of its subcontractors comply with the Authority's health and safety requirements and Plant rules at all times when on site at the Plant.

19. Work Plan, Project Procedures Manual, Weekly Meeting

The Service Provider shall develop a work plan as part of the Proposal submission, and later refine and include the work plan in a "Project Procedures Manual." The Project Procedures Manual shall be prepared and available for the use of the Provider and Authority personnel before the Services commence.

The Service Provider shall hold weekly meetings, at a minimum, at a time and place acceptable to the Authority, to discuss any problems or issues that have arisen, to inform the Authority of logistical planning, and to keep in touch with the Authority personnel.

20. Start of Work

The Service Provider shall be prepared to begin the Services on January 1, 2027.

21. Daily Reports

The Service Provider will communicate with the Authority on a daily basis (via email or text, as appropriate) the following:

a. NOAA/NWS two (2) day-hourly forecast graph targeted to the nearest municipality for the current Beneficial Use site(s) and containing the following parameters: temperature, precipitation potential, relative

humidity, rain, (snow, sleet, freezing rain when applicable in winter months) and surface winds.

b. During Beneficial Use projects, early daily communication with the agronomist from the Authority's Residuals Department stating the number of trucks and their destinations, to include site stockpile location~~s~~ when applicable.

c. Other relevant information regarding availability and tonnage of Biosolids for Beneficial Use and Unlimed Solids for further processing for Beneficial Use, to be compiled into monthly reports as described in Section 3.4, Paragraph 22 (Monthly Beneficial Use and Hauling Reports) of this Article III.

22. Monthly Beneficial Use and Hauling Reports

The Service Provider shall prepare and submit two (2) monthly reports via email to the Authority's Residuals Department (using a pdf format except where indicated below) covering the Provider's activities for the previous calendar month.

A Monthly Hauling Report shall be submitted within ten (10) days from the end of the reporting month, accompanied by the Service Provider's monthly invoice for Services, and shall identify and/or contain the following information:

a. An itemized list of all loads transported each day in the reporting month in excel format containing the following information for each load:

(i) Type of material as Biosolids and Unlimed Solids if both were provided;
(ii) Respective wet tonnage hauled as reported by ALCOSAN's scale;
(iii) Respective wet tonnage received by another facility like landfills or digestors;
(iv) Manifest numbers;
(v) Hauling location identified in a manner consistent with ALCOSAN's naming convention;
(vi) Loading start and ending times for each truck; and
(vii) Summary for each day of the month including total tonnage and number of loads hauled, number of loads scheduled, tonnage and number of loads beneficially used, tonnage and number of loads disposed.

b. Supporting documentation for all loads including all tickets and manifests as described in Section 3.4, Paragraph 12 (Documenting Tonnage for Invoicing) of this Article III.

A Monthly Beneficial Use Report shall be submitted within thirty (30) days from the end of the reporting month, and shall identify and/or contain the following information:

a. Work completed within the reporting month.

b. All documentation necessary to show Beneficial Use or operational compliance with applicable Permits and Applicable Laws and Regulations during the reporting month, such as, but not limited to, accurate mapping showing specific area and calculated acres utilized, any agronomic rate calculation sheets, accurate and complete cumulative pollutant loading rates, new soil sampling results, service provider certification statements, Landowner/Operator "NANI" (Notice and Necessary Information), OEPA's Table 9, etc., as required by Applicable Laws and Regulations or requested by the Authority.

   (i) Monitoring log (which may include pictures) recording signage posting and verification dates, site recertification basics, and equipment calibration information, or any other information that routinely needs to be monitored by the Service Provider or its subcontractors as part of compliance responsibilities;
   (ii) Complaint log with corrective action on problems that occurred during the reporting month and/or description of any anticipated problems;
   (iii) Written summary of any inspections or compliance issues, with corrective action taken;.
   (iv) Storage log in the case where hauled material was not used by the end of the reporting month;
   (v) Documentation of odor checks that follows the procedures described in the Provider's Field Storage Plan; and
   (vi) Documentation of all instances when highly odorous or extraordinarily wet material was deemed inappropriate for Beneficial Use and directed to landfilling by the Provider's on-site personnel.

All monthly reports shall be submitted in electronic format in a manner consistent with the Authority's filing system. Delay in the submission of monthly reports may result in non-payment of invoices.

The Provider shall also provide any assistance or information necessary for the Authority to fulfill its reporting requirements under Applicable Laws and Regulations and applicable Permits.

23. Payment

The Proposal Prices set forth on the Proposal Form submitted by the successful Proposer shall be the prices paid by the Authority for the Services. Payment for the Services will be made in accordance with the Service Agreement. The Service Provider's invoices shall reference total tons removed, trip tickets and manifests, and the Monthly Hauling Reports described in Section 3.4, Paragraph 22 (Monthly Beneficial Use and Hauling Reports) of this Article III.

The Service Provider shall pay all taxes, fees, royalties, and other charges related to the Services, and said charges shall be included in the Proposal Prices set forth in the Proposal Form.

Any shortfall payment due from the Authority to the Service Provider, as outlined in Section 3.4, Paragraph 1 (Quantities) of this Article III, and any penalty payment due from the Service Provider to the Authority, as outlined in Section 3.4, Paragraph 5 (Beneficial Use Targets) of this Article III, shall be calculated and specified by the Authority to the Service Provider within sixty (60) days after the expiration of the Service Agreement (the "Reconciliation"), and any amounts due shall be paid by the Service Provider and/or by the Authority, as the case may be, within thirty (30) days after such calculation and specification by the Authority. The Authority reserves the right to withhold the final payment due to the Service Provider under the Service Agreement and to set off against such final payment any amounts due from the Service Provider to the Authority as determined pursuant to the Reconciliation.

24. Inspections and Tours

The Service Provider shall at all times allow designated Authority personnel and regulatory officials to inspect equipment, methods, reports, and Beneficial Use sites. The Provider shall assist upon request in these inspections, including providing staff with knowledge about the sites and escorting individuals to the sites as needed. The Authority reserves the right to have a representative make unannounced site inspections. These inspections may occur once each week or as the need arises during Beneficial Use months.

25. Construction at Plant

During the term of the Service Agreement, various construction projects will be in progress at the Plant. These construction projects may cause temporary delays, disruptions, and interference with the Provider's performance of the Services. The Authority will endeavor to provide prior notice of such construction projects to the Service Provider and to minimize the impact of these construction projects as much as reasonably possible, and the Service Provider shall perform the Services to the best of its ability. If construction at the Plant causes material delays, disruptions, or interference with the Provider's performance of the Services, the Provider must

notify the Authority within twenty-four (24) hours of becoming aware of the situation.

26. Space Requirements

Any space (i.e., physical real estate) or utilities necessary for any processing of the Biosolids and Unlimed Solids beyond what is done at the Plant shall be the responsibility of the Service Provider.

27. Odor Control

The Service Provider shall submit a Biosolids and Unlimed Solids Odor Control Plan to the Authority for its review and approval as part of the Proposal Documents. The provisions of the Odor Control Plan must be in accordance with the US EPA's *Biosolids and Residuals Fact Sheet: Odor Control in Biosolids Management* (EPA 832-F-00-067) and other Applicable Laws and Regulations. The Provider shall not commence performance under the Service Agreement until the Odor Control Plan has been approved by the Authority.

The Service Provider shall notify the Authority of any odor complaints received within one (1) calendar day of receipt and shall inform the Authority as to how the complaint has been addressed within three (3) calendar days thereafter. If the Provider receives significant odor complaints, it is possible that a Governmental Authority or the Authority may restrict any land application, land reclamation, or tree-trenching, or remove offending sites from the PA General Permit or the Ohio NPDES Permit. The Provider shall have a plan for handling these situations, including a process to abate/remove the odor and/or have the sites replaced under the PA General Permit or the Ohio NPDES Permit.

With an Authority-approved Odor Control Plan, the Service Provider may process the Authority's Biosolids and Unlimed Solids further, in addition to the manner contemplated in these Proposal Documents, if appropriate authorizations and permits are obtained from Governmental Authorities.

If the Service Provider provides any further processing for any reason (such as odor control), the Service Provider shall hold the Authority harmless for any additional costs or liabilities, in accordance with Article IX of the Service Agreement.

28. PA General Permit and Ohio NPDES Permit

The Authority currently holds the PA DEP General Permit, #PAG-08-6101. The Authority also holds the Ohio NPDES Permit, 51N00000*FD. The Provider shall assist the Authority in renewal of the Permits and will comply with the provisions of any current, renewed, or reissued Permit. Copies of the PA General Permit and the Ohio NPDES Permit are set forth on Appendix C and Appendix D hereto, respectively.

29. Demurrage

The Authority recognizes that delays occur in the loading process, and the Service Provider's trucks may, as a result, stand idle for a prolonged period of time. The Authority will reimburse the Service Provider for excessive idle truck time on the following basis: after a two (2) hour wait (excluding any loading time), the Service Provider will receive One Hundred Dollars ($100.00) per hour, allocated pro rata and paid in one-tenth ($1/10^{th}$) hour (six (6) minute) increments, until loading is initiated or the truck is released from service by the Authority or the Service Provider. The truck may be released if the Authority determines that there is no more loading to be done that day, in which case the Service Provider will receive Three Hundred Dollars ($300.00).

30. CPI Adjustment

The Proposal Prices set forth on the Proposal Form shall be adjusted on each anniversary date of the Service Agreement by the percentage increase, if any, in the Consumer Price Index for All Urban Consumers (CPI-U), Pittsburgh metropolitan area, All Items, Base Period 1982-84=100, as published by the U.S. Bureau of Labor Statistics (or any successor index thereto). The Authority shall provide written notice to the Provider of the adjusted amount thirty (30) days prior to each anniversary date.

APPENDICES

Appendix A Limed Solids Monthly and Quarterly Testing Results - 2025

Appendix B Unlimed Solids Annual Testing Results - 2025

Appendix C PA DEP General Permit

Appendix D Ohio NPDES Permit

Appendix E List of Landfills with Completed Waste Characterizations

Appendix F ALCOSAN Lab Outline

APPENDIX A TO SCOPE OF SERVICES

LIMED SOLIDS MONTHLY AND QUARTERLY TESTING RESULTS - 2025

[See Attached]

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250106014 **Sample Date:** 1/5/2025

Sample ID Number: 250106014-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	Contract Lab	EurofinsPittsburgh	1/23/2025	1200	mg/Dry Kg	60	4 FH	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.MS and/or MSD recovery above control limits
Contract Lab								
Kjeldahl Nitrogen, Total	Contract Lab	EurofinsLancaster	1/16/2025	68000	mg/kg dry	23000		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	1/10/2025	7.4	mg/kg dry	3.5	HT	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	1/8/2025	4.6	mg/kg dry	2.8		
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	1/10/2025	7.9	mg/kg dry	3.5	HT	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	1/8/2025	35	%	0.50		
Metals								
Arsenic	Contract Lab	EurofinsLancaster	1/14/2025	6.5	mg/kg dry	1.1		

Printed Date
Tuesday, February 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250106014 **Sample Date:** 1/5/2025

Sample ID Number: 250106014-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Cadmium	Contract Lab	EurofinsLancaster	1/14/2025	0.86	mg/kg dry	0.27		
Chromium	Contract Lab	EurofinsLancaster	1/14/2025	34	mg/kg dry	1.1		
Copper	Contract Lab	EurofinsLancaster	1/14/2025	240	mg/kg dry	1.1		
Lead	Contract Lab	EurofinsLancaster	1/14/2025	43	mg/kg dry	0.54	^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits
Molybdenum	Contract Lab	EurofinsLancaster	1/16/2025	7.7	mg/kg dry	0.54		
Nickel	Contract Lab	EurofinsLancaster	1/14/2025	18	mg/kg dry	1.1		
Phosphorus, Total	~~EPA6010C~~ Contract Lab VAH 2-11-25	RJLeeGroup	1/8/2025	5320	mg/kg	48.3		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	1/14/2025	1800	mg/kg dry	110		
Selenium	Contract Lab	EurofinsLancaster	1/14/2025	3.4	mg/kg dry	1.1		
Zinc	Contract Lab	EurofinsLancaster	1/14/2025	470	mg/kg dry	81		

Printed Date
Tuesday, February 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250106014 **Sample Date:** 1/5/2025

Sample ID Number: 250106014-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
HT	Outside of Holding Time

Comments:

1/1,1/2,1/5

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

2-11-25

Date

Printed Date
Tuesday, February 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250131015 **Sample Date:** 1/30/2025

Sample ID Number: 250131015-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	2/3/2025	31	%	0.50		
Metals								
Mercury, Total	Contract Lab	EurofinsLancaster	2/10/2025	<0.19	mg/Dry Kg	0.19	FH	MS and/or MSD recovery above control limits

Data Qualifier **Data Qualifier Description**

Comments:

1/28,1/29,1/30

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

2-11-25

Date

Printed Date
Tuesday, February 11, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 1/24/2025 12:03:30 PM

JOB DESCRIPTION

MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025
250106014

JOB NUMBER

180-184919-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 11
QC Sample Results 12
QC Association Summary 18
Chain of Custody 21
Receipt Checklists 24

Job Narrative
180-184919-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 1/7/2025 10:45 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.5°C and 1.8°C.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: The continuing calibration verification (CCV) associated with batch 180-487963 recovered above the upper control limit for Nitrite as N. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 180-487963/28).

Method 9056A_ORGFM_48H - Soluble: The following sample was diluted due to the nature of the sample matrix: 250106014-01 (180-184919-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 350.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: 250106014-01 (180-184919-1), (180-184919-A-1-E MS) and (180-184919-A-1-F MSD). Elevated reporting limits (RLs) are provided.

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-488890 and analytical batch 180-488939 were outside control limits for ammonia. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F3	Duplicate RPD exceeds the control limit
FH	MS and/or MSD recovery above control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-184919-1	250106014-01	Solid	01/05/25 17:00	01/07/25 10:45

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
350.1	Distillation, Ammonia	EPA	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Client Sample ID: 250106014-01 — **Lab Sample ID: 180-184919-1**
Date Collected: 01/05/25 17:00 — **Matrix: Solid**
Date Received: 01/07/25 10:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			487918	01/08/25 10:40	EBA	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250106014-01 — **Lab Sample ID: 180-184919-1**
Date Collected: 01/05/25 17:00 — **Matrix: Solid**
Date Received: 01/07/25 10:45 — **Percent Solids: 35.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			010.0366 g	100 mL	487998	01/09/25 11:16	ERP	EET PIT
Soluble	Analysis	EPA 9056A		2.5	1 mL	1 mL	488038	01/10/25 15:17	SJM	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3050B			1.05 g	100 mL	594429	01/10/25 20:45	UAMX	ELLE
Total/NA	Analysis	6020B		2			595512	01/14/25 22:07	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	3050B			1.05 g	100 mL	594429	01/10/25 20:45	UAMX	ELLE
Total/NA	Analysis	6020B		10			595512	01/14/25 22:09	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	3050B			1.05 g	100 mL	594429	01/10/25 20:45	UAMX	ELLE
Total/NA	Analysis	6020B		2			596539	01/16/25 17:24	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	351.2			.25 g	25 mL	595695	01/15/25 10:40	NLE3	ELLE
Total/NA	Analysis	351.2		50			596318	01/16/25 10:30	JCG7	ELLE
	Instrument ID: 5791									
Total/NA	Prep	350.1			0.19 g	10 mL	488890	01/23/25 07:09	BAB	EET PIT
Total/NA	Analysis	EPA 350.1		2			488939	01/23/25 13:06	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									
Soluble	Leach	DI Leach			10.01 g	100.0 mL	487875	01/08/25 08:06	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			487924	01/08/25 09:24	RSK	EET PIT
	Instrument ID: ASTORIA2									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Analyst References:

Lab: EET PIT

Batch Type: Leach

ERP = Evan Papak

RSK = Robert Kurtz

Batch Type: Prep

BAB = Brooke Batyi

Batch Type: Analysis

BAB = Brooke Batyi

EBA = Elizabeth Arbster

RSK = Robert Kurtz

SJM = Shannon Mueller

Lab: ELLE

Batch Type: Prep

NLE3 = Thomas Schmertz

UAMX = Annamaria Kuhns

Batch Type: Analysis

JCG7 = Elena Hass

LHF4 = Diamond Boyer

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Client Sample ID: 250106014-01
Date Collected: 01/05/25 17:00
Date Received: 01/07/25 10:45

Lab Sample ID: 180-184919-1
Matrix: Solid
Percent Solids: 35.3

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	7.9	H	3.5		mg/Kg	☼		01/10/25 15:17	2.5
Nitrate as N	7.4	H	3.5		mg/Kg	☼		01/10/25 15:17	2.5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.5		1.1		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2
Cadmium	0.86		0.27		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2
Calcium	95000		540		mg/Kg	☼	01/10/25 20:45	01/14/25 22:09	10
Chromium	34		1.1		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2
Copper	240		1.1		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2
Lead	43	^2	0.54		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2
Molybdenum	7.7		0.54		mg/Kg	☼	01/10/25 20:45	01/16/25 17:24	2
Nickel	18		1.1		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2
Potassium	1800		110		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2
Selenium	3.4		1.1		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2
Zinc	470		81		mg/Kg	☼	01/10/25 20:45	01/14/25 22:07	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	68000		23000		mg/Kg	☼	01/15/25 10:40	01/16/25 10:30	50
Ammonia (EPA 350.1)	1200	4 FH	60		mg/Kg	☼	01/23/25 07:09	01/23/25 13:06	2
Total Solids (SM 2540G)	35		0.50		%			01/08/25 10:40	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	4.6		2.8		mg/Kg	☼		01/08/25 09:24	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-487998/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 487963

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			01/09/25 15:36	1
Nitrate as N	ND		0.50		mg/Kg			01/09/25 15:36	1

Lab Sample ID: LCS 180-487998/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 487963

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	13.7		mg/Kg		110	80 - 120
Nitrate as N	12.5	13.4		mg/Kg		107	80 - 120

Lab Sample ID: 180-184954-B-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 487963

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND	^c	13.2	14.5		mg/Kg	☼	110	80 - 120
Nitrate as N	ND		13.2	14.0		mg/Kg	☼	108	80 - 120

Lab Sample ID: 180-184954-B-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 487963

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND	^c	13.2	14.6		mg/Kg	☼	111	80 - 120	1	15
Nitrate as N	ND		13.2	14.1		mg/Kg	☼	107	80 - 120	1	15

Lab Sample ID: MB 180-487998/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 488036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			01/10/25 14:51	1
Nitrate as N	ND		0.50		mg/Kg			01/10/25 14:51	1

Lab Sample ID: LCS 180-487998/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 488036

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	12.1		mg/Kg		97	80 - 120
Nitrate as N	12.5	11.7		mg/Kg		94	80 - 120

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-594429/1-A ^2
Matrix: Solid
Analysis Batch: 595512

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 594429

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Cadmium	ND		0.10		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Calcium	ND	^+	40		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Chromium	ND		0.40		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Copper	ND		0.40		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Lead	ND		0.20		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Molybdenum	ND		0.20		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Nickel	ND		0.40		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Potassium	ND		40		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Selenium	ND		0.40		mg/Kg		01/10/25 20:45	01/14/25 20:33	2
Zinc	ND		30		mg/Kg		01/10/25 20:45	01/14/25 20:33	2

Lab Sample ID: LCS 410-594429/2-A ^2
Matrix: Solid
Analysis Batch: 595512

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	48.3		mg/Kg		97	87 - 114
Cadmium	5.00	5.03		mg/Kg		101	88 - 117
Chromium	50.0	48.1		mg/Kg		96	86 - 116
Copper	50.0	48.7		mg/Kg		97	84 - 115
Lead	5.00	5.18		mg/Kg		104	88 - 117
Molybdenum	5.00	4.90		mg/Kg		98	86 - 119
Nickel	50.0	49.0		mg/Kg		98	87 - 115
Potassium	500	458		mg/Kg		92	83 - 118
Selenium	10.0	10.0		mg/Kg		100	87 - 115
Zinc	50.0	48.6		mg/Kg		97	86 - 116

Lab Sample ID: LCS 410-594429/2-A ^2
Matrix: Solid
Analysis Batch: 596014

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 594429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	500	474		mg/Kg		95	84 - 119

Lab Sample ID: 410-203120-G-8-B MS ^10
Matrix: Solid
Analysis Batch: 595512

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 594429

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	20		52.8	72.4		mg/Kg	☼	100	75 - 125
Cadmium	1.4		5.28	7.05		mg/Kg	☼	108	75 - 125
Calcium	4500	4 ^+	528	5170	4	mg/Kg	☼	122	75 - 125
Chromium	54		52.8	99.8		mg/Kg	☼	87	75 - 125
Copper	100		52.8	161		mg/Kg	☼	108	75 - 125
Lead	950	4 ^2	5.28	993	4	mg/Kg	☼	726	75 - 125
Molybdenum	3.6		5.28	9.27		mg/Kg	☼	108	75 - 125
Nickel	33		52.8	86.4		mg/Kg	☼	102	75 - 125
Potassium	850	FH	528	1890	FH	mg/Kg	☼	195	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-203120-G-8-B MS ^10 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 595512 — **Prep Batch: 594429**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	ND		10.6	12.2		mg/Kg	☼	102	75 - 125
Zinc	200	FH	52.8	261		mg/Kg	☼	108	75 - 125

Lab Sample ID: 410-203120-G-8-B MS ^2 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 595512 — **Prep Batch: 594429**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	21		52.8	78.0		mg/Kg	☼	107	75 - 125
Cadmium	1.7		5.28	7.28		mg/Kg	☼	107	75 - 125
Calcium	5000	^+	528	5620	4	mg/Kg	☼	117	75 - 125
Chromium	58		52.8	110		mg/Kg	☼	100	75 - 125
Copper	110		52.8	172		mg/Kg	☼	117	75 - 125
Molybdenum	3.8		5.28	9.98		mg/Kg	☼	116	75 - 125
Nickel	35		52.8	96.0		mg/Kg	☼	116	75 - 125
Potassium	1000	FH	528	2100	FH	mg/Kg	☼	209	75 - 125
Selenium	1.4		10.6	12.0		mg/Kg	☼	100	75 - 125
Zinc	220	FH	52.8	276	4	mg/Kg	☼	113	75 - 125

Lab Sample ID: 410-203120-G-8-C MSD ^10 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 595512 — **Prep Batch: 594429**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	20		54.7	77.3		mg/Kg	☼	105	75 - 125	7	20
Cadmium	1.4		5.47	7.78		mg/Kg	☼	117	75 - 125	10	20
Calcium	4500	4 ^+	547	5450	4	mg/Kg	☼	169	75 - 125	5	20
Chromium	54		54.7	101		mg/Kg	☼	85	75 - 125	1	20
Copper	100		54.7	172		mg/Kg	☼	123	75 - 125	6	20
Lead	950	4 ^2	5.47	960	4	mg/Kg	☼	101	75 - 125	3	20
Molybdenum	3.6		5.47	9.81		mg/Kg	☼	114	75 - 125	6	20
Nickel	33		54.7	91.2		mg/Kg	☼	107	75 - 125	5	20
Potassium	850	FH	547	2080	FH	mg/Kg	☼	224	75 - 125	10	20
Selenium	ND		10.9	12.7		mg/Kg	☼	103	75 - 125	4	20
Zinc	200	FH	54.7	287	FH	mg/Kg	☼	152	75 - 125	9	20

Lab Sample ID: 410-203120-G-8-C MSD ^2 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 595512 — **Prep Batch: 594429**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	21		54.7	80.8		mg/Kg	☼	109	75 - 125	4	20
Cadmium	1.7		5.47	7.71		mg/Kg	☼	111	75 - 125	6	20
Calcium	5000	^+	547	5670	4	mg/Kg	☼	124	75 - 125	1	20
Chromium	58		54.7	103		mg/Kg	☼	82	75 - 125	7	20
Copper	110		54.7	177		mg/Kg	☼	122	75 - 125	3	20
Molybdenum	3.8		5.47	9.84		mg/Kg	☼	110	75 - 125	1	20
Nickel	35		54.7	92.2		mg/Kg	☼	105	75 - 125	4	20
Potassium	1000	FH	547	2260	FH	mg/Kg	☼	231	75 - 125	7	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-203120-G-8-C MSD ^2 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 595512 — **Prep Batch: 594429**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	1.4		10.9	13.6		mg/Kg	☼	111	75 - 125	13	20
Zinc	220	FH	54.7	291	FH	mg/Kg	☼	138	75 - 125	6	20

Lab Sample ID: 410-203120-G-8-A DU ^10 — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 595512 — **Prep Batch: 594429**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	20		21.8		mg/Kg	☼	11	20
Cadmium	1.4		1.89	F3	mg/Kg	☼	33	20
Calcium	4500	4 ^+	4320		mg/Kg	☼	5	20
Chromium	54		45.8		mg/Kg	☼	16	20
Copper	100		98.9		mg/Kg	☼	6	20
Lead	950	4 ^2	861		mg/Kg	☼	10	20
Molybdenum	3.6		3.23		mg/Kg	☼	10	20
Nickel	33		31.5		mg/Kg	☼	4	20
Potassium	850	FH	1000		mg/Kg	☼	16	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Zinc	200	FH	196		mg/Kg	☼	4	20

Lab Sample ID: 410-203120-G-8-A DU ^2 — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 595512 — **Prep Batch: 594429**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	21		21.8		mg/Kg	☼	2	20
Cadmium	1.7		1.63		mg/Kg	☼	10	20
Calcium	5000	^+	4360		mg/Kg	☼	14	20
Chromium	58		46.1	F3	mg/Kg	☼	22	20
Copper	110		101		mg/Kg	☼	9	20
Molybdenum	3.8		3.52		mg/Kg	☼	9	20
Nickel	35		31.9		mg/Kg	☼	8	20
Potassium	1000	FH	1070		mg/Kg	☼	7	20
Selenium	1.4		1.36		mg/Kg	☼	5	20
Zinc	220	FH	196		mg/Kg	☼	10	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: 460-318270-B-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 596316 — **Prep Batch: 595695**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	6700	FL	2750	7930	FL	mg/Kg	☼	45	70 - 130

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 460-318270-B-1-D DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 596316 — **Prep Batch: 595695**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	6700	FL	5980		mg/Kg	☼	11	20

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-468690/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 488939 — **Prep Batch: 488890**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		11		mg/Kg		01/23/25 07:09	01/23/25 13:03	1

Lab Sample ID: LCS 180-488890/5-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 488939 — **Prep Batch: 488890**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	95.2	98.9		mg/Kg		104	90 - 110

Lab Sample ID: 180-184919-1 MS — **Client Sample ID: 250106014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 488939 — **Prep Batch: 488890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	1200	4 FH	257	1540	4	mg/Kg	☼	150	90 - 110

Lab Sample ID: 180-184919-1 MSD — **Client Sample ID: 250106014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 488939 — **Prep Batch: 488890**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	1200	4 FH	314	1770	FH	mg/Kg	☼	196	90 - 110	14	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-487875/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 487924

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			01/08/25 09:21	1

Lab Sample ID: LCS 180-487875/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 487924

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	20.6		mg/Kg		103	90 - 110

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 180-184919-1 MS — **Client Sample ID: 250106014-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 487924

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	4.6		56.6	58.6		mg/Kg	☼	95	90 - 110

Lab Sample ID: 180-184919-1 MSD — **Client Sample ID: 250106014-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 487924

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	4.6		56.6	59.6		mg/Kg	☼	97	90 - 110	2	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-184912-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 487918

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	71		70.2		%		0.5	10

Lab Sample ID: 180-184915-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 487918

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	29		27.0		%		6	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

HPLC/IC

Analysis Batch: 487963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-487998/1-A	Method Blank	Soluble	Solid	EPA 9056A	487998
LCS 180-487998/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	487998
180-184954-B-1-D MS	Matrix Spike	Soluble	Solid	EPA 9056A	487998
180-184954-B-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	487998

Leach Batch: 487998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Soluble	Solid	DI Leach	
MB 180-487998/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-487998/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-184954-B-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
180-184954-B-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 488036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Soluble	Solid	EPA 9056A	487998
MB 180-487998/1-A	Method Blank	Soluble	Solid	EPA 9056A	487998
LCS 180-487998/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	487998

Metals

Prep Batch: 594429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Total/NA	Solid	3050B	
MB 410-594429/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-594429/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
410-203120-G-8-B MS ^10	Matrix Spike	Total/NA	Solid	3050B	
410-203120-G-8-B MS ^2	Matrix Spike	Total/NA	Solid	3050B	
410-203120-G-8-C MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-203120-G-8-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-203120-G-8-A DU ^10	Duplicate	Total/NA	Solid	3050B	
410-203120-G-8-A DU ^2	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 595512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Total/NA	Solid	6020B	594429
180-184919-1	250106014-01	Total/NA	Solid	6020B	594429
MB 410-594429/1-A ^2	Method Blank	Total/NA	Solid	6020B	594429
LCS 410-594429/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	594429
410-203120-G-8-B MS ^10	Matrix Spike	Total/NA	Solid	6020B	594429
410-203120-G-6-B MS ^2	Matrix Spike	Total/NA	Solid	6020B	594429
410-203120-G-8-C MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	6020B	594429
410-203120-G-8-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	8020B	594429
410-203120-G-8-A DU ^10	Duplicate	Total/NA	Solid	6020B	594429
410-203120-G-8-A DU ^2	Duplicate	Total/NA	Solid	6020B	594429

Analysis Batch: 596014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-594429/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	594429

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025

Job ID: 180-184919-1
SDG: 250106014

Metals

Analysis Batch: 596539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Total/NA	Solid	6020B	594429

General Chemistry

Leach Batch: 487875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Soluble	Solid	DI Leach	
MB 180-487875/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-487875/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-184919-1 MS	250106014-01	Soluble	Solid	DI Leach	
180-184919-1 MSD	250106014-01	Soluble	Solid	DI Leach	

Analysis Batch: 467918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Total/NA	Solid	SM 2540G	
180-184912-A-1 DU	Duplicate	Total/NA	Solid	SM 2540G	
180-184915-A-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

Analysis Batch: 467924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Soluble	Solid	EPA 353.2	487875
MB 180-487875/1-A	Method Blank	Soluble	Solid	EPA 353.2	487875
LCS 180-487875/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	487875
180-184919-1 MS	250106014-01	Soluble	Solid	EPA 353.2	487875
180-184919-1 MSD	250106014-01	Soluble	Solid	EPA 353.2	487875

Prep Batch: 488890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Total/NA	Solid	350.1	
MB 180-488890/4-A	Method Blank	Total/NA	Solid	350.1	
LCS 180-488890/5-A	Lab Control Sample	Total/NA	Solid	350.1	
180-184919-1 MS	250106014-01	Total/NA	Solid	350.1	
180-184919-1 MSD	250106014-01	Total/NA	Solid	350.1	

Analysis Batch: 488939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Total/NA	Solid	EPA 350.1	488890
MB 180-488890/4-A	Method Blank	Total/NA	Solid	EPA 350.1	488890
LCS 180-488890/5-A	Lab Control Sample	Total/NA	Solid	EPA 350.1	488890
180-184919-1 MS	250106014-01	Total/NA	Solid	EPA 350.1	488890
180-184919-1 MSD	250106014-01	Total/NA	Solid	EPA 350.1	488890

Prep Batch: 595695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Total/NA	Solid	351.2	
460-318270-B-1-E MS	Matrix Spike	Total/NA	Solid	351.2	
460-318270-B-1-D DU	Duplicate	Total/NA	Solid	351.2	

Analysis Batch: 596316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-184919-1	250106014-01	Total/NA	Solid	351.2	595695

General Chemistry (Continued)

Analysis Batch: 596316 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-318270-B-1-E MS	Matrix Spike	Total/NA	Solid	351.2	595695
460-318270-B-1-D DU	Duplicate	Total/NA	Solid	351.2	595695

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250106014**

Additional Information : **Monthly Limed Sludge 1/1,1/2,1/5**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, NH3 Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn, Hg			
							Number of Containers					
250106014-01	1/5/25	1700	S	N	C	***5 DAY TURN AROUND***	1	1	1			

180-184919 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	1/7/25	0955	[signature]	Eurofins Pgh	1-7-25	0955
[signature]	EPTINE	1-7-25	1045	[signature]	EPTINE	1-7-25	1045
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required.

COC Analyst Cooler Review: Initials: [illegible] Date: 1/6/25

Supervisor Review: Initials: [illegible] Date: 1-6-25

Alcosan

J1 1.3 → 0.5

J2 2.6 → 1.8

180-184919 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-531289.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-184919-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 1/20/2025			
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: MONTHLY LIMED SLUDGE 1/1,1/2,1/5/2025	Project #: 18007110			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Drinking, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_Prep Nitrogen, Total Kjeldahl	6020B/3005B (KOD) PPL Metals by ICP/MS 6020B	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
250106014-01 (180-184919-1)	1/5/25	17:00 Eastern	G	Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	1-8-25 1300	ELLE		8Jan25 1500	ELLE
	8Jan25 1845	ELLE			
				1/8/25 1845	ELLE

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No		R: 2.8 C: 2.7

Ver: 10/10/2024
1/24/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-184919-1
SDG Number: 250106014

Login Number: 184919
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-184919-1
SDG Number: 250106014

Login Number: 184919
List Number: 2
Creator: Fuehrer, Stephanie

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 01/08/25 08:06 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 2/11/2025 6:18:46 AM

JOB DESCRIPTION

Monthly Limed Sludge 1/28, 1/29, 1/30
250131015

JOB NUMBER

180-185875-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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2/11/2025 6:18:46 AM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 12
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 17

Job Narrative
180-185875-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 1/31/2025 12:07 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Qualifiers

Metals

Qualifier	Qualifier Description
FH	MS and/or MSD recovery above control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Reletive Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-185875-1	250131015-01	Solid	01/30/25 15:00	01/31/25 12:07

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Method	Method Description	Protocol	Laboratory
7471B	Mercury (CVAA)	SW846	ELLE
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
7471B	Preparation, Mercury	SW846	ELLE

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Client Sample ID: 250131015-01 **Lab Sample ID: 180-185875-1**
Date Collected: 01/30/25 15:00 **Matrix: Solid**
Date Received: 01/31/25 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			489497	02/03/25 12:20	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250131015-01 **Lab Sample ID: 180-185875-1**
Date Collected: 01/30/25 15:00 **Matrix: Solid**
Date Received: 01/31/25 12:07 **Percent Solids: 31.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.61 g	100 mL	603883	02/09/25 23:10	UAMX	ELLE
Total/NA	Analysis	7471B		1			604494	02/10/25 19:10	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Analysis
  - ELS = Edwin Shireman

Lab: ELLE
- Batch Type: Prep
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - IJ3I = Elizabeth Brittingham

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Client Sample ID: 250131015-01
Date Collected: 01/30/25 15:00
Date Received: 01/31/25 12:07

Lab Sample ID: 180-185875-1
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	31		0.50		%			02/03/25 12:20	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Client Sample ID: 250131015-01
Date Collected: 01/30/25 15:00
Date Received: 01/31/25 12:07

Lab Sample ID: 180-185875-1
Matrix: Solid
Percent Solids: 31.1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	FH	0.19		mg/Kg	☼	02/09/25 23:10	02/10/25 19:10	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-603883/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604494 — **Prep Batch: 603883**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		02/09/25 23:10	02/10/25 19:06	1

Lab Sample ID: LCS 410-603883/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604494 — **Prep Batch: 603883**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.181		mg/Kg		109	80 - 120

Lab Sample ID: 180-185875-1 MS — **Client Sample ID: 250131015-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604494 — **Prep Batch: 603883**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	FH	0.518	0.863	FH	mg/Kg	☼	134	80 - 120

Lab Sample ID: 180-185875-1 MSD — **Client Sample ID: 250131015-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604494 — **Prep Batch: 603883**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	FH	0.518	0.912	FH	mg/Kg	☼	143	60 - 120	6	20

Lab Sample ID: 180-185875-1 DU — **Client Sample ID: 250131015-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604494 — **Prep Batch: 603883**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND	FH	0.318		mg/Kg	☼	NC	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-185875-1 DU — **Client Sample ID: 250131015-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 489497

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	31		31.0		%		0.3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 1/28, 1/29, 1/30

Job ID: 180-185875-1
SDG: 250131015

Metals

Prep Batch: 603883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-185875-1	250131015-01	Total/NA	Solid	7471B	
MB 410-603883/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-603883/2-A	Lab Control Sample	Total/NA	Solid	7471B	
180-185875-1 MS	250131015-01	Total/NA	Solid	7471B	
180-185875-1 MSD	250131015-01	Total/NA	Solid	7471B	
180-185875-1 DU	250131015-01	Total/NA	Solid	7471B	

Analysis Batch: 604494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-185875-1	250131015-01	Total/NA	Solid	7471B	603883
MB 410-603883/1-A	Method Blank	Total/NA	Solid	7471B	603883
LCS 410-603883/2-A	Lab Control Sample	Total/NA	Solid	7471B	603883
180-185875-1 MS	250131015-01	Total/NA	Solid	7471B	603883
180-185875-1 MSD	250131015-01	Total/NA	Solid	7471B	603883
180-185875-1 DU	250131015-01	Total/NA	Solid	7471B	603883

General Chemistry

Analysis Batch: 489497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-185875-1	250131015-01	Total/NA	Solid	SM 2540G	
180-185875-1 DU	250131015-01	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250131015**

Additional Information : **Monthly Limed Sludge 1/28,1/29,1/30**

Tests to be Performed: Nitrate-Nitrite Nitrogen (Savannah GA Lab) Hg

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers
250131015-01	1/30/25	1500	S	N	C	***5 DAY TURN AROUND***	1
						<6 #26 CF-0.9	
						3.3 CT 2.4	

180-185875 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	1/31/25	1133	[signature]	~~Eurofins Pah~~	1/31/25	11 33
[signature]	ALCOSAN	1/31/25	1207	[signature]	EPIHAVE	1-31-25	1207

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required

COC Analyst Cooler Review: Initials:_____ Date:_____ Supervisor Review: Initials:_____ Date:_____

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

alcosan
allegheny county sanitary authority

ALCOSAN LIMS ID: **250131015**

Additional Information : **Monthly Limed Sludge 1/28,1/29,1/30**

Tests to be Performed

~~Nitrate-Nitrite Nitrogen (Savannah GA Lab)~~ 1-31-25
Hg MERCURY

2/11/2025

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers					
250131015-01	1/30/25	1500	S	N	C	***5 DAY TURN AROUND***	1					

Page 15 of 18

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	1/31/25	1133	Lorna Shea	~~Eurofins Pgh~~	1/31/25	11:33
Lorna Shea	ALCOSAN	1/31/25	1207	[signature]	[illegible]	1-31-25	1207

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results. PADEP Accredited test methods required.

COC Analyst Cooler Review: Initials:_____ Date:_____ Supervisor Review: Initials:_____ Date:_____

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-532693.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-185875-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 2/10/2025			
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Monthly Limed Sludge 1/28, 1/29, 1/30	Project #: 18007110			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7471B/7471B_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
250131015-01 (180-185875-1)	1/30/25	15:00 Eastern	G	Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 01/5/25 1300	Company: [illegible]	Received by:	Date/Time: 5 Feb 25 1315	Company: ELLE	
Relinquished by:	Date/Time: 3 Feb 25 1915	Company: ELLE	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2/5/25 19:15	Company: ELLET	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.3.2	0.3.1		

Ver: 10/10/2024

2/11/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-185875-1
SDG Number: 250131015

Login Number: 185875
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-185875-1
SDG Number: 250131015

Login Number: 185875
List Number: 2
Creator: Santiago, Nathaniel

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 02/06/25 10:44 AM

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have baen compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4610
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA070120250010
Samples Received: January 7, 2025
Report Date: January 13, 2025
Client Project: 250106014
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250106014-01	PA070120250010-001	01/05/2025, 05:00 PM	Phosphorus	0.532	5320	0.00483	48.3	01/08/2025	P

Comments: Sample results reported on a dried weight basis.

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)
A: AIHA LAP, LLC Accredited (Lab ID 100364)
E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded
B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided
— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accreditations

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250115013 **Sample Date:** 1/14/2025

Sample ID Number: 250115013-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	1/17/2025	See attached report	ug/Kg Dry	46		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	1/16/2025	36	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by: Jerissa Hawk

2-6-25

Date

Printed Date

Thursday, February 6, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 1/20/2025 1:18:54 PM

JOB DESCRIPTION

Limed Sludge Monthly
250115013

JOB NUMBER

180-185311-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 17

Job ID: 180-185311-1 — Eurofins Pittsburgh

Job Narrative
180-185311-1

Receipt
The sample was received on 1/15/2025 2:40 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.2° C.

Receipt Exceptions

The Field Sampler was not listed on the Chain of Custody.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 250115005-01 (180-185311-1). The container labels list 250115013-01 while the chain has 250115005-01. Logged per the chain.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
^c	CCV Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

Laboratory: Eurofins Pittsburgh

Tha accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-185311-1	250115013-01	Solid	01/14/25 11:20	01/15/25 14:40

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

Client Sample ID: 250115013-01
Date Collected: 01/14/25 11:20
Date Received: 01/15/25 14:40

Lab Sample ID: 180-185311-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			488473	01/16/25 12:35	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250115013-01
Date Collected: 01/14/25 11:20
Date Received: 01/15/25 14:40

Lab Sample ID: 180-185311-1
Matrix: Solid
Percent Solids: 36.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	488414	01/16/25 07:23	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 uL	1 uL	488515	01/17/25 20:11	JMO	EET PIT
	Instrument ID: CHGC16									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

MKK = Mary Kenny

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

Client Sample ID: 250115013-01
Date Collected: 01/14/25 11:20
Date Received: 01/15/25 14:40

Lab Sample ID: 180-185311-1
Matrix: Solid
Percent Solids: 36.1

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	^c	46		ug/Kg	☼	01/16/25 07:23	01/17/25 20:11	1
PCB-1221	ND		46		ug/Kg	☼	01/16/25 07:23	01/17/25 20:11	1
PCB-1232	ND		46		ug/Kg	☼	01/16/25 07:23	01/17/25 20:11	1
PCB-1242	ND		46		ug/Kg	☼	01/16/25 07:23	01/17/25 20:11	1
PCB-1248	ND		46		ug/Kg	☼	01/16/25 07:23	01/17/25 20:11	1
PCB-1254	ND	*3	46		ug/Kg	☼	01/16/25 07:23	01/17/25 20:11	1
PCB-1260	ND	*3	46		ug/Kg	☼	01/16/25 07:23	01/17/25 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*63*		*60 - 135*	*01/16/25 07:23*	*01/17/25 20:11*	*1*
Tetrachloro-m-xylene (Surr)	*63*		*60 - 135*	*01/16/25 07:23*	*01/17/25 20:11*	*1*
DCB Decachlorobiphenyl (Surr)	*61*	*3	*57 - 146*	*01/16/25 07:23*	*01/17/25 20:11*	*1*
DCB Decachlorobiphenyl (Surr)	*70*	*3	*57 - 146*	*01/16/25 07:23*	*01/17/25 20:11*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**36**		0.50		%			01/16/25 12:35	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-488414/1-A
Matrix: Solid
Analysis Batch: 488515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488414

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		01/16/25 07:23	01/17/25 15:12	1
PCB-1221	ND		17		ug/Kg		01/16/25 07:23	01/17/25 15:12	1
PCB-1232	ND		17		ug/Kg		01/16/25 07:23	01/17/25 15:12	1
PCB-1242	ND		17		ug/Kg		01/16/25 07:23	01/17/25 15:12	1
PCB-1248	ND		17		ug/Kg		01/16/25 07:23	01/17/25 15:12	1
PCB-1254	ND		17		ug/Kg		01/16/25 07:23	01/17/25 15:12	1
PCB-1260	ND		17		ug/Kg		01/16/25 07:23	01/17/25 15:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*97*		*60 - 135*	*01/16/25 07:23*	*01/17/25 15:12*	*1*
Tetrachloro-m-xylene (Surr)	*103*		*60 - 135*	*01/16/25 07:23*	*01/17/25 15:12*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*57 - 146*	*01/16/25 07:23*	*01/17/25 15:12*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*57 - 146*	*01/16/25 07:23*	*01/17/25 15:12*	*1*

Lab Sample ID: LCS 180-488414/2-A
Matrix: Solid
Analysis Batch: 488515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488414

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	903		ug/Kg		68	48 - 132
PCB-1260	1330	842		ug/Kg		63	45 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*82*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*88*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*78*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*77*		*57 - 146*

Lab Sample ID: LCSD 180-488414/3-A
Matrix: Solid
Analysis Batch: 488515

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 488414

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	1330	1070		ug/Kg		80	48 - 132	17	25
PCB-1260	1330	1030		ug/Kg		77	45 - 128	20	23

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*96*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*104*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*90*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*94*		*57 - 146*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-185216-A-1 DU
Matrix: Solid
Analysis Batch: 488473

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	36			35.2		%				2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-185311-1
SDG: 250115013

GC Semi VOA

Prep Batch: 488414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-185311-1	250115013-01	Total/NA	Solid	3541	
MB 180-488414/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-488414/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-488414/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Analysis Batch: 488515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-185311-1	250115013-01	Total/NA	Solid	EPA 8082A	488414
MB 180-488414/1-A	Method Blank	Total/NA	Solid	EPA 8082A	488414
LCS 180-488414/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	488414
LCSD 180-488414/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8082A	488414

General Chemistry

Analysis Batch: 488473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-185311-1	250115013-01	Total/NA	Solid	SM 2540G	
180-185216-A-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250115005**

Additional Information : Limed Sludge Monthly

Tests to be Performed: Total Solids, PCB

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers					
250115005-01	1/14/25	1120	S	N	G	** 5 day rush**	1					

180-185311 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	ALCOSAN	01 15 25	1204	[illegible]	Eurofins Pgh	1-15-25	1204
[illegible]	EPTNE	1-15-25	1440	[illegible]	EPTNE	1/15/25	1440
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: [illegible] Date: 1/15/25

Supervisor Review: Initials:_____ Date:_____

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250115013**

Additional Information : Limed Sludge Monthly

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers (Tests to be Performed: Total Solids, PCB)					
250115013-01	1/14/25	1120	S	N	G	** 5 day rush**	1					

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company ALCOSAN	Date	Time	Received By	Company Eurofins Pgh	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials:_____ Date:_____ Supervisor Review: Initials:_____ Date:_____

Alcosan #17 -0.8

J10 2.0 → 1.2

180-185311 Waybill

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-185311-1
SDG Number: 250115013

Login Number: 185311
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250205014 **Sample Date:** 2/4/2025

Sample ID Number: 250205014-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	Contract Lab	EurofinsPittsburgh	2/13/2025	2000	mg/Dry Kg	60		
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	2/11/2025	35000	mg/Dry Kg	18000		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	2/13/2025	7.4	mg/kg dry	1.4		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	2/11/2025	8.4	mg/kg dry	2.7	FL	MS and/or MSD recovery below control limits
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	2/13/2025	4.3	mg/kg dry	1.4		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	2/10/2025	37	%	0.50		
Metals								
Arsenic	Contract Lab	EurofinsLancaster	2/18/2025	7.6	mg/kg dry	0.85		
Cadmium	Contract Lab	EurofinsLancaster	2/18/2025	1.1	mg/kg dry	0.21		
Calcium	Contact Lab	EurofinsLancaster	2/18/2025	130000	mg/kg dry	430	^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
Chromium	Contract Lab	EurofinsLancaster	2/18/2025	42	mg/kg dry	0.85		
Copper	Contract Lab	EurofinsLancaster	2/18/2025	260	mg/kg dry	0.85		
Lead	Contract Lab	EurofinsLancaster	2/18/2025	62	mg/kg dry	0.43		

Printed Date
Wednesday, March 12, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250205014 **Sample Date:** 2/4/2025

Sample ID Number: 250205014-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Mercury, Total	Contract Lab	EurofinsLancaster	2/18/2025	0.35	mg/kg dry	0.15	FH	MS and/or MSD recovery above control limits.
Molybdenum	Contract Lab	EurofinsLancaster	2/18/2025	8.1	mg/kg dry	0.43		
Nickel	Contract Lab	EurofinsLancaster	2/18/2025	18	mg/kg dry	0.85		
Phosphorus, Total	~~EPA6010C~~ Contract Lab UH 3-12-25	RJLeeGroup	2/10/2025	5680	mg/kg	48.2		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	2/18/2025	2300	mg/kg dry	85		
Selenium	Contract Lab	EurofinsLancaster	2/18/2025	3.7	mg/kg dry	0.85		
Zinc	Contract Lab	EurofinsLancaster	2/18/2025	620	mg/kg dry	64		

Printed Date
Wednesday, March 12, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250205014 **Sample Date:** 2/4/2025

Sample ID Number: 250205014-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hoover

3-12-25

Date

Printed Date
Wednesday, March 12, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250205014 **Sample Date:** 2/4/2025

Sample ID Number: 250205014-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Fixed Solids	SM 2540G - 2015	lfalck/bbatson	2/6/2025	48.27	%			
Percent Total Solids	SM 2540G - 2015	lfalck/bbatson	2/6/2025	35.8	%			
Percent Volatile Solids	SM 2540G - 2015	lfalck/bbatson	2/6/2025	51.73	%			

Data Qualifier **Data Qualifier Description**

Comments:

Released by:

Larissa Hovel

3-12-25

Date

Printed Date
Wednesday, March 12, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 2/19/2025 3:53:21 PM

JOB DESCRIPTION

MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025
250205014

JOB NUMBER

180-186099-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 11
QC Sample Results 12
QC Association Summary 16
Chain of Custody 18
Receipt Checklists 22

Job ID: 180-186099-1 — Eurofins Pittsburgh

Job Narrative
180-186099-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 2/5/2025 3:00 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperetures of the 2 coolers at receipt time were 0.8°C and 0.9°C.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: The following samples were diluted to bring the concentration of target analytes within the calibration range: (180-183239-A-55-C), (180-183239-A-55-D MS) and (180-183239-A-55-E MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 350.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250205014-01 (180-186099-1). Elevated reporting limits (RLs) are provided.

Method 353.2 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-489956 and analytical batch 180-490056 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit
FH	MS and/or MSD recovery above control limits.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-186099-1	250205014-01	Solid	02/04/25 13:00	02/05/25 15:00

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7471A	Mercury (CVAA)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
350.1	Distillation, Ammonia	EPA	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
7471A	Preparation, Mercury	SW846	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Client Sample ID: 250205014-01 — **Lab Sample ID: 180-186099-1**
Date Collected: 02/04/25 13:00 — **Matrix: Solid**
Date Received: 02/05/25 15:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			489999	02/10/25 12:20	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250205014-01 — **Lab Sample ID: 180-186099-1**
Date Collected: 02/04/25 13:00 — **Matrix: Solid**
Date Received: 02/05/25 15:00 — **Percent Solids: 36.9**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			010.0301 g	100 mL	490263	02/13/25 12:57	ERP	EET PIT
Soluble	Analysis	EPA 9056A		1	1 mL	1 mL	490213	02/13/25 22:05	SJM	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3050B			1.27 g	100 mL	606973	02/17/25 21:30	UAMX	ELLE
Total/NA	Analysis	6020B		2			607820	02/19/25 13:00	F7JF	ELLE
	Instrument ID: E07 - 27813									
Total/NA	Prep	3050B			1.27 g	100 mL	606973	02/17/25 21:30	UAMX	ELLE
Total/NA	Analysis	6020B		10			607820	02/19/25 13:02	F7JF	ELLE
	Instrument ID: E07 - 27813									
Total/NA	Prep	3050B			1.27 g	100 mL	606973	02/17/25 21:30	UAMX	ELLE
Total/NA	Analysis	6020B		2			607477	02/18/25 19:23	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	7471A			0.63 g	100 mL	606976	02/17/25 23:45	UAMX	ELLE
Total/NA	Analysis	7471A		1			607286	02/18/25 12:13	X3ZX	ELLE
	Instrument ID: M10 – 31820									
Total/NA	Prep	351.2			.24 g	25 mL	604183	02/10/25 11:08	NLE3	ELLE
Total/NA	Analysis	351.2		40			604841	02/11/25 13:09	JCG7	ELLE
	Instrument ID: 25924									
Total/NA	Prep	350.1			0.18 g	10 mL	490192	02/12/25 17:53	BAB	EET PIT
Total/NA	Analysis	EPA 350.1		2			490280	02/13/25 15:52	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									
Soluble	Leach	DI Leach			9.96 g	100.0 mL	489956	02/11/25 04:00	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			490056	02/11/25 10:21	RSK	EET PIT
	Instrument ID: ASTORIA2									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Analyst References:

Lab: EET PIT

Batch Type: Leach

ERP = Evan Papak

RSK = Robert Kurtz

Batch Type: Prep

BAB = Brooke Batyl

Batch Type: Analysis

BAB = Brooke Batyl

ELS = Edwin Shireman

RSK = Robert Kurtz

SJM = Shannon Mueller

Lab: ELLE

Batch Type: Prep

NLE3 = Thomas Schmertz

UAMX = Annamaria Kuhns

Batch Type: Analysis

F7JF = Dennis Dick

JCG7 = Elena Hess

LHF4 = Diamond Boyer

X3ZX = Skyler Ruf

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Client Sample ID: 250205014-01
Date Collected: 02/04/25 13:00
Date Received: 02/05/25 15:00

Lab Sample ID: 180-186099-1
Matrix: Solid
Percent Solids: 36.9

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	4.3		1.4		mg/Kg	☼		02/13/25 22:05	1
Nitrate as N	7.4		1.4		mg/Kg	☼		02/13/25 22:05	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.6		0.85		mg/Kg	☼	02/17/25 21:30	02/18/25 19:23	2
Cadmium	1.1		0.21		mg/Kg	☼	02/17/25 21:30	02/18/25 19:23	2
Calcium	130000	^2	430		mg/Kg	☼	02/17/25 21:30	02/19/25 13:02	10
Chromium	42		0.85		mg/Kg	☼	02/17/25 21:30	02/18/25 19:23	2
Copper	260		0.85		mg/Kg	☼	02/17/25 21:30	02/18/25 19:23	2
Lead	62		0.43		mg/Kg	☼	02/17/25 21:30	02/18/25 19:23	2
Molybdenum	8.1		0.43		mg/Kg	☼	02/17/25 21:30	02/18/25 19:23	2
Nickel	18		0.85		mg/Kg	☼	02/17/25 21:30	02/19/25 13:00	2
Potassium	2300		85		mg/Kg	☼	02/17/25 21:30	02/19/25 13:00	2
Selenium	3.7		0.85		mg/Kg	☼	02/17/25 21:30	02/18/25 19:23	2
Zinc	620		84		mg/Kg	☼	02/17/25 21:30	02/18/25 19:23	2

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35	FH	0.15		mg/Kg	☼	02/17/25 23:45	02/18/25 12:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	35000		18000		mg/Kg	☼	02/10/25 11:08	02/11/25 13:09	40
Ammonia (EPA 350.1)	2000		60		mg/Kg	☼	02/12/25 17:53	02/13/25 15:52	2
Total Solids (SM 2540G)	37		0.50		%			02/10/25 12:20	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	8.4	FL	2.7		mg/Kg	☼		02/11/25 10:21	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-490263/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 490213

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			02/13/25 17:06	1
Nitrate as N	ND		0.50		mg/Kg			02/13/25 17:06	1

Lab Sample ID: LCS 180-490263/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 490213

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	12.3		mg/Kg		98	80 - 120
Nitrate as N	12.5	12.4		mg/Kg		99	80 - 120

Lab Sample ID: 180-183239-A-55-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 490213

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		16.9	15.0		mg/Kg	☼	89	80 - 120
Nitrate as N	ND		16.9	16.0		mg/Kg	☼	95	80 - 120

Lab Sample ID: 180-183239-A-55-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 490213

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		16.8	14.9		mg/Kg	☼	89	80 - 120	1	15
Nitrate as N	ND		16.8	15.9		mg/Kg	☼	95	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-606973/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 607477 — **Prep Batch: 606973**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Cadmium	ND		0.10		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Calcium	ND		40		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Chromium	ND		0.40		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Copper	ND		0.40		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Lead	ND		0.20		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Molybdenum	ND		0.20		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Nickel	ND		0.40		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Potassium	ND		40		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Selenium	ND		0.40		mg/Kg		02/17/25 21:30	02/18/25 18:01	2
Zinc	ND		30		mg/Kg		02/17/25 21:30	02/18/25 18:01	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-606973/2-A ^2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 607477 — **Prep Batch: 606973**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	55.3		mg/Kg		111	87 - 114
Cadmium	5.00	5.59		mg/Kg		112	88 - 117
Calcium	500	570		mg/Kg		114	84 - 119
Chromium	50.0	56.1		mg/Kg		112	86 - 116
Copper	50.0	55.8		mg/Kg		112	84 - 115
Lead	5.00	5.58		mg/Kg		112	88 - 117
Molybdenum	5.00	5.70		mg/Kg		114	86 - 119
Potassium	500	568		mg/Kg		114	83 - 118
Selenium	10.0	10.9		mg/Kg		109	67 - 115
Zinc	50.0	58.0		mg/Kg		116	86 - 116

Lab Sample ID: LCS 410-606973/2-A ^2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 607820 — **Prep Batch: 606973**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nickel	50.0	49.3		mg/Kg		99	87 - 115

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 410-606976/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 607286 — **Prep Batch: 606976**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		02/17/25 23:45	02/18/25 12:09	1

Lab Sample ID: LCS 410-606976/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 607286 — **Prep Batch: 606976**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.168		mg/Kg		101	80 - 120

Lab Sample ID: 180-186099-1 MS — **Client Sample ID: 250205014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 607286 — **Prep Batch: 606976**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.35	FH	0.431	0.880	FH	mg/Kg	☼	123	80 - 120

Lab Sample ID: 180-186099-1 MSD — **Client Sample ID: 250205014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 607286 — **Prep Batch: 606976**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.35	FH	0.431	0.846		mg/Kg	☼	115	80 - 120	4	20

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 180-186099-1 DU — **Client Sample ID: 250205014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 607286 — **Prep Batch: 606976**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.35	FH	0.681	F3	mg/Kg	☼	64	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-604183/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604841 — **Prep Batch: 604183**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		02/10/25 11:08	02/11/25 11:52	1

Lab Sample ID: LCS 410-604183/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604841 — **Prep Batch: 604183**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	398	419		mg/Kg		105	70 - 130

Lab Sample ID: 460-319882-B-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604841 — **Prep Batch: 604183**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	5000	FH	2360	8540	FH	mg/Kg	☼	150	70 - 130

Lab Sample ID: 460-319882-B-1-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 604841 — **Prep Batch: 604183**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	5000	FH	6210	F5	mg/Kg	☼	21	20

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-490192/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490280 — **Prep Batch: 490192**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		11		mg/Kg		02/12/25 17:53	02/13/25 15:46	1

Lab Sample ID: LCS 180-490192/5-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490280 — **Prep Batch: 490192**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	95.2	102		mg/Kg		107	90 - 110

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

Method: EPA 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 180-490192/6-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490280 — **Prep Batch: 490192**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	100	102		mg/Kg		102	90 - 110	0	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-489956/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 490056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			02/11/25 10:18	1

Lab Sample ID: LCS 180-489956/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 490056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	19.9		mg/Kg		99	90 - 110

Lab Sample ID: 180-186099-1 MS — **Client Sample ID: 250205014-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 490056

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	8.4	FL	54.4	56.0	FL	mg/Kg	☼	88	90 - 110

Lab Sample ID: 180-186099-1 MSD — **Client Sample ID: 250205014-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 490056

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	8.4	FL	54.4	56.0	FL	mg/Kg	☼	88	90 - 110	0	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-186099-1 DU — **Client Sample ID: 250205014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 489999

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	37		37.7		%		2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

HPLC/IC

Analysis Batch: 490213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Soluble	Solid	EPA 9056A	490263
MB 180-490263/1-A	Method Blank	Soluble	Solid	EPA 9056A	490263
LCS 180-490263/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	490263
180-183239-A-55-D MS	Matrix Spike	Soluble	Solid	EPA 9056A	490263
180-183239-A-55-E MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	490263

Leach Batch: 490263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-186099-1	250205014-01	Soluble	Solid	DI Leach	
MB 180-490263/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-490263/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-183239-A-55-D MS	Matrix Spike	Soluble	Solid	DI Leach	
180-183239-A-55-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Metals

Prep Batch: 606973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	3050B	
MB 410-606973/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-606973/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 606976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	7471A	
MB 410-606976/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 410-606976/2-A	Lab Control Sample	Total/NA	Solid	7471A	
180-186099-1 MS	250205014-01	Total/NA	Solid	7471A	
180-186099-1 MSD	250205014-01	Total/NA	Solid	7471A	
180-186099-1 DU	250205014-01	Total/NA	Solid	7471A	

Analysis Batch: 607286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	7471A	606976
MB 410-606976/1-A	Method Blank	Total/NA	Solid	7471A	606976
LCS 410-606976/2-A	Lab Control Sample	Total/NA	Solid	7471A	606976
180-186099-1 MS	250205014-01	Total/NA	Solid	7471A	606976
180-186099-1 MSD	250205014-01	Total/NA	Solid	7471A	606976
180-186099-1 DU	250205014-01	Total/NA	Solid	7471A	606976

Analysis Batch: 607477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	6020B	606973
MB 410-606973/1-A ^2	Method Blank	Total/NA	Solid	6020B	606973
LCS 410-606973/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	606973

Analysis Batch: 607820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	6020B	606973
180-186099-1	250205014-01	Total/NA	Solid	6020B	606973
LCS 410-606973/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	606973

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025

Job ID: 180-186099-1
SDG: 250205014

General Chemistry

Leach Batch: 489956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Soluble	Solid	DI Leach	
MB 180-489956/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-489956/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-186099-1 MS	250205014-01	Soluble	Solid	DI Leach	
180-186099-1 MSD	250205014-01	Soluble	Solid	DI Leach	

Analysis Batch: 489999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	SM 2540G	
180-186099-1 DU	250205014-01	Total/NA	Solid	SM 2540G	

Analysis Batch: 490056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Soluble	Solid	EPA 353.2	489956
MB 180-489956/1-A	Method Blank	Soluble	Solid	EPA 353.2	489956
LCS 180-489956/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	489956
180-186099-1 MS	250205014-01	Soluble	Solid	EPA 353.2	489956
180-186099-1 MSD	250205014-01	Soluble	Solid	EPA 353.2	489956

Prep Batch: 490192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	350.1	
MB 180-490192/4-A	Method Blank	Total/NA	Solid	350.1	
LCS 180-490192/5-A	Lab Control Sample	Total/NA	Solid	350.1	
LCSD 180-490192/6-A	Lab Control Sample Dup	Total/NA	Solid	350.1	

Analysis Batch: 490280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	EPA 350.1	490192
MB 180-490192/4-A	Method Blank	Total/NA	Solid	EPA 350.1	490192
LCS 180-490192/5-A	Lab Control Sample	Total/NA	Solid	EPA 350.1	490192
LCSD 180-490192/6-A	Lab Control Sample Dup	Total/NA	Solid	EPA 350.1	490192

Prep Batch: 604183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	351.2	
MB 410-604183/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-604183/1-A	Lab Control Sample	Total/NA	Solid	351.2	
460-319882-B-1-C MS	Matrix Spike	Total/NA	Solid	351.2	
460-319882-B-1-B DU	Duplicate	Total/NA	Solid	351.2	

Analysis Batch: 604841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186099-1	250205014-01	Total/NA	Solid	351.2	604183
MB 410-604183/2-A	Method Blank	Total/NA	Solid	351.2	604183
LCS 410-604183/1-A	Lab Control Sample	Total/NA	Solid	351.2	604183
460-319882-B-1-C MS	Matrix Spike	Total/NA	Solid	351.2	604183
460-319882-B-1-B DU	Duplicate	Total/NA	Solid	351.2	604183

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250205014**

Additional Information : **Monthly Limed Sludge 2/2,2/3,2/4**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, NH3 Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn, Hg			
							Number of Containers					
250205014-01	2/4/25	1300	S	N	C	***5 DAY TURN AROUND***	1	1	1			

180-186099 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	2/5/25	1000	[signature]	Eurofins Pgh	2-5-25	1000
[signature]	EHINE	2-5-25	1500	[signature]	EHINE	2-5-25	1500
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results. PADEP Accredited test methods required.

COC Analyst Cooler Review: Initials: [illegible] Date: 2/5/25

Supervisor Review: Initials: [illegible] Date: 2-5-25

Alcosan #17 -0.8

J6 1.8 → 0.9

J7 1.7 → 0.8

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-532827.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-186099-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 2/18/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: MONTHLY LIMED SLUDGE 2/2,2/3,2/4/2025	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_Prep Nitrogen, Total Kjeldahl	6020B/3050B (MOD) PPL Metals by ICP/MS 6020B	7471A/7471A_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
250205014-01 (180-186099-1)	2/4/25	13:00 Eastern	G	Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	2/7/25 1445	EPITHNE	[signature]	2/7/25 1445	ELLE
[signature]	2/7/25 1915	ELLE			
			[signature]	2/7/25 19:15	ELLET

Custody Seals Intact: ☒ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R1.6 C1.5

Ver: 10/10/2024

ICOC No:
180-532827

Containers

Count	Container Type	Preservative
1	Soil jar 16oz - clear glass	None

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-186099-1
SDG Number: 250205014

Login Number: 186099
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-186099-1
SDG Number: 250205014

Login Number: 186099
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 02/07/25 09:35 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Lerissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA060220250011
Samples Received: February 6, 2025
Report Date: February 13, 2025
Client Project: 250205014
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250205014-01	PA060220250011-001	02/04/2025, 01:00 PM	Phosphorus	0.568	5680	0.00482	48.2	02/10/2025	P

Comments:

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)
A : AIHA LAP, LLC Accredited (Lab ID 100364)
E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded
B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided
— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accreditations

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropiate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250206017 **Sample Date:** 2/6/2025

Sample ID Number: 250206017-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	2/11/2025	See attached report	ug/Kg Dry	43		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	2/10/2025	38	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCB/solids

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

3-6-25

Date

Printed Date

Thursday, March 6, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 2/12/2025 10:33:51 AM

JOB DESCRIPTION

Limed Sludge Monthly
250206017

JOB NUMBER

180-186226-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
2/12/2025 10:33:51 AM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 15

Job Narrative
180-186226-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 2/7/2025 9:37 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C.

PCBs
Method 8082A: The following semples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 250206017-01 (180-186226-1), (LCS 180-489924/2-A), (MB 180-489924/1-A), (180-186226-A-1-A MS) and (180-186226-A-1-B MSD).6215174

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce metrix interferences caused by sulfur: 250206017-01 (180-186226-1), (LCS 180-489924/2-A), (MB 180-489924/1-A), (180-186226-A-1-A MS) end (180-186226-A-1-B MSD).6239381
4297660

Method 8082A: Surrogate recovery for the following sample was outside control limits: (180-186226-A-1-B MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: The continuing calibration verification (CCV) associated with 180-490023 recovered low and outside the control limits for surrogate TCMX on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCVIS 180-490023/5).

Method 8082A: The continuing calibration verification (CCV) associated with batch 180-490023 recovered outside acceptance criteria, low biased, for surrogate TCMX. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the deta are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-186226-1
SDG: 250206017

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-186226-1
SDG: 250206017

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-186226-1
SDG: 250206017

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-186226-1	250206017-01	Solid	02/06/25 11:01	02/07/25 09:37

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-186226-1
SDG: 250206017

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-186226-1
SDG: 250206017

Client Sample ID: 250206017-01 **Lab Sample ID: 180-186226-1**
Date Collected: 02/06/25 11:01 **Matrix: Solid**
Date Received: 02/07/25 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			489999	02/10/25 12:20	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250206017-01 **Lab Sample ID: 180-186226-1**
Date Collected: 02/06/25 11:01 **Matrix: Solid**
Date Received: 02/07/25 09:37 **Percent Solids: 38.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	20.0 mL	489924	02/10/25 07:11	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	490023	02/11/25 12:42	JMO	EET PIT
	Instrument ID: CHGC8									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

MKK = Mary Kenny

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-186226-1
SDG: 250206017

Client Sample ID: 250206017-01
Date Collected: 02/06/25 11:01
Date Received: 02/07/25 09:37

Lab Sample ID: 180-186226-1
Matrix: Solid
Percent Solids: 38.1

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		43		ug/Kg	☼	02/10/25 07:11	02/11/25 12:42	1
PCB-1221	ND		43		ug/Kg	☼	02/10/25 07:11	02/11/25 12:42	1
PCB-1232	ND		43		ug/Kg	☼	02/10/25 07:11	02/11/25 12:42	1
PCB-1242	ND		43		ug/Kg	☼	02/10/25 07:11	02/11/25 12:42	1
PCB-1248	ND		43		ug/Kg	☼	02/10/25 07:11	02/11/25 12:42	1
PCB-1254	ND		43		ug/Kg	☼	02/10/25 07:11	02/11/25 12:42	1
PCB-1260	ND		43		ug/Kg	☼	02/10/25 07:11	02/11/25 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*63*	*^c*	*60 - 135*	*02/10/25 07:11*	*02/11/25 12:42*	*1*
Tetrachloro-m-xylene (Surr)	*60*	*^c*	*60 - 135*	*02/10/25 07:11*	*02/11/25 12:42*	*1*
DCB Decachlorobiphenyl (Surr)	*75*		*57 - 146*	*02/10/25 07:11*	*02/11/25 12:42*	*1*
DCB Decachlorobiphenyl (Surr)	*73*		*57 - 146*	*02/10/25 07:11*	*02/11/25 12:42*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**38**		0.50		%			02/10/25 12:20	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-186226-1
SDG: 250206017

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-489924/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490023 — **Prep Batch: 489924**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		02/10/25 07:11	02/11/25 12:24	1
PCB-1221	ND		17		ug/Kg		02/10/25 07:11	02/11/25 12:24	1
PCB-1232	ND		17		ug/Kg		02/10/25 07:11	02/11/25 12:24	1
PCB-1242	ND		17		ug/Kg		02/10/25 07:11	02/11/25 12:24	1
PCB-1248	ND		17		ug/Kg		02/10/25 07:11	02/11/25 12:24	1
PCB-1254	ND		17		ug/Kg		02/10/25 07:11	02/11/25 12:24	1
PCB-1260	ND		17		ug/Kg		02/10/25 07:11	02/11/25 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*80*		*60 - 135*	*02/10/25 07:11*	*02/11/25 12:24*	*1*
Tetrachloro-m-xylene (Surr)	*78*		*60 - 135*	*02/10/25 07:11*	*02/11/25 12:24*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*57 - 146*	*02/10/25 07:11*	*02/11/25 12:24*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*57 - 146*	*02/10/25 07:11*	*02/11/25 12:24*	*1*

Lab Sample ID: LCS 180-489924/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490023 — **Prep Batch: 489924**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	956		ug/Kg		72	48 - 132
PCB-1260	1330	1010		ug/Kg		76	45 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*77*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*75*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*85*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*82*		*57 - 146*

Lab Sample ID: 180-186226-1 MS — **Client Sample ID: 250206017-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490023 — **Prep Batch: 489924**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		3460	2330		ug/Kg	☼	68	48 - 132
PCB-1260	ND		3460	2260		ug/Kg	☼	65	45 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*65*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*63*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*79*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*69*		*57 - 146*

Lab Sample ID: 180-186226-1 MSD — **Client Sample ID: 250206017-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490023 — **Prep Batch: 489924**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		3500	2240		ug/Kg	☼	64	48 - 132	4	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-186226-1 MSD — **Client Sample ID: 250206017-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490023 — **Prep Batch: 489924**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		3500	2210		ug/Kg	☼	63	45 - 128	2	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*62*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*58*	*S1-*	*60 - 135*
DCB Decachlorobiphenyl (Surr)	*79*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*74*		*57 - 146*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-186235-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 489999

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	84		82.1		%		2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-186226-1
SDG: 250206017

GC Semi VOA

Prep Batch: 489924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186226-1	250206017-01	Total/NA	Solid	3541	
MB 180-489924/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-489924/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-186226-1 MS	250206017-01	Total/NA	Solid	3541	
180-186226-1 MSD	250206017-01	Total/NA	Solid	3541	

Analysis Batch: 490023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186226-1	250206017-01	Total/NA	Solid	EPA 8082A	489924
MB 180-489924/1-A	Method Blank	Total/NA	Solid	EPA 8082A	489924
LCS 180-489924/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	489924
180-186226-1 MS	250206017-01	Total/NA	Solid	EPA 8082A	489924
180-186226-1 MSD	250206017-01	Total/NA	Solid	EPA 8082A	489924

General Chemistry

Analysis Batch: 489999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186226-1	250206017-01	Total/NA	Solid	SM 2540G	
180-186235-A-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250206017**

Additional Information : Limed Sludge Monthly

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers	Tests to be Performed: Total Solids, PCB					
								J1 #17	40 -0.9 3.2				
250206017-01	2/6/25	1101	S	N	G	** 5 day rush**	1						

180-186226 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	02-07-25	0907	[signature]	Eurofins Pgh	2-7-25	0907
[signature]	EPTINE	02-07-25	09:37	[signature]	EPTINE	2-7-25	0937
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: YH Date: 2/7/25

Supervisor Review: Initials: SJ Date: 2-6-25

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-186226-1
SDG Number: 250206017

Login Number: 186226
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250306012 **Sample Date:** 3/5/2025

Sample ID Number: 250306012-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	Contract Lab	EurofinsPittsburgh	3/15/2025	1500	mg/Dry Kg	57		
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	3/13/2025	17000	mg/kg dry	8300		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	3/10/2025	<7.8	mg/kg dry	7.8		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	3/11/2025	4.1	mg/kg dry	3.1		
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	3/10/2025	<7.8	mg/kg dry	7.8		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	3/10/2025	32	%	0.50		
Metals								
Arsenic	Contract Lab	EurofinsLancaster	3/13/2025	7.0	mg/kg dry	1.1		
Cadmium	Contract Lab	EurofinsLancaster	3/13/2025	0.89	mg/kg dry	0.27		
Chromium	Contract Lab	EurofinsLancaster	3/13/2025	39	mg/kg dry	1.1		
Copper	Contract Lab	EurofinsLancaster	3/13/2025	150	mg/kg dry	1.1		
Lead	Contract Lab	EurofinsLancaster	3/13/2025	35	mg/kg dry	0.54		
Mercury, Total	EPA 7471B	jweaver	3/19/2025	0.31	mg/Dry Kg	0.18		
Molybdenum	Contract Lab	EurofinsLancaster	3/13/2025	5.3	mg/kg dry	0.54		

Printed Date
Thursday, March 27, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250306012 **Sample Date:** 3/5/2025

Sample ID Number: 250306012-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Nickel	Contract Lab	EurofinsLancaster	3/13/2025	24	mg/kg dry	1.1		
Phosphorus, Total	~~EPA6010C~~ Contract Lab WH 3-27-25	RJLeeGroup	3/11/2025	6560	mg/kg	48.2		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	3/13/2025	2500	mg/kg dry	110		
Selenium	Contract Lab	EurofinsLancaster	3/13/2025	3.2	mg/kg dry	1.1		
Zinc	Contract Lab	EurofinsLancaster	3/13/2025	420	mg/kg dry	81		

Printed Date
Thursday, March 27, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250306012 **Sample Date:** 3/5/2025

Sample ID Number: 250306012-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

3/2/25, 3/4/25, 3/5/25 Composite

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hawk

3-27-25

Date

Printed Date
Thursday, March 27, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250306012 **Sample Date:** 3/6/2025

Sample ID Number: 250306012-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	SM 2540G - 2015	lfalck	3/7/2025	31.4	%			

Data Qualifier **Data Qualifier Description**

Comments:

3/2/25, 3/4/25, 3/5/25 Composite

Released by:

Larissa Hawk

3-27-25

Date

Printed Date
Thursday, March 27, 2025

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA070320250005
Samples Received: March 7, 2025
Report Date: March 14, 2025
Client Project: 250306012
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250306012-01	PA070320250005-001	03/05/2025, 04:45 PM	Phosphorus	0.656	6560	0.00482	48.2	03/11/2025	P

Comments: Sample results reported on a dried weight basis.

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)
A: AIHA LAP, LLC Accredited (Lab ID 100364)
— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accredidations

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropiate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 3/18/2025 8:17:16 AM

JOB DESCRIPTION

Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25
250306012

JOB NUMBER

180-187525-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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3/18/2025 8:17:16 AM

Authorized for release by
Shali Brown, Project Manager II
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(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 11
QC Sample Results 12
QC Association Summary 18
Chain of Custody 20
Receipt Checklists 24

Job Narrative
180-187525-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 3/7/2025 1:10 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8°C and 2.2°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: The following sample was diluted due to the nature of the sample matrix: 250306012-01 (180-187525-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540G: The sample duplicate precision for the following sample associated with analytical batch 180-491646 was outside control limits: 250306012-01 (180-187525-1) and (180-187525-A-1 DU). Non-homogeneity of the sample matrix is suspected. Sample consisted of sticky bits of material that would not homogenize. Total Solids

Method 350.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250306012-01 (180-187525-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-187525-1	250306012-01	Solid	03/05/25 15:45	03/07/25 13:10

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
350.1	Distillation, Ammonia	EPA	EET PIT
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Client Sample ID: 250306012-01 — **Lab Sample ID: 180-187525-1**
Date Collected: 03/05/25 15:45 — **Matrix: Solid**
Date Received: 03/07/25 13:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			491646	03/10/25 15:43	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250306012-01 — **Lab Sample ID: 180-187525-1**
Date Collected: 03/05/25 15:45 — **Matrix: Solid**
Date Received: 03/07/25 13:10 — **Percent Solids: 32.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			10.0245 g	100 mL	491629	03/10/25 11:58	ERP	EET PIT
Soluble	Analysis	EPA 9056A		5	1 mL	1 mL	491641	03/10/25 18:00	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3050B			1.16 g	100 mL	616016	03/13/25 02:44	UJL8	ELLE
Total/NA	Analysis	6020B		2			616864	03/13/25 17:01	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	3050B			1.16 g	100 mL	616016	03/13/25 02:44	UJL8	ELLE
Total/NA	Analysis	6020B		10			616864	03/13/25 17:03	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	351.2			0.30 g	25 mL	616183	03/12/25 16:00	YZU9	ELLE
Total/NA	Analysis	351.2		20			616652	03/13/25 13:19	JCG7	ELLE
	Instrument ID: 5791									
Total/NA	Prep	350.1			0.22 g	10 mL	491938	03/14/25 16:25	BAB	EET PIT
Total/NA	Analysis	EPA 350.1		2			491955	03/15/25 13:05	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									
Soluble	Leach	DI Leach			10.05 g	100.0 mL	491673	03/11/25 08:12	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			491704	03/11/25 12:39	RSK	EET PIT
	Instrument ID: ASTORIA2									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - ERP = Evan Papak
  - RSK = Robert Kurtz
- Batch Type: Prep
  - BAB = Brooke Batyl
- Batch Type: Analysis
  - BAB = Brooke Batyl
  - ERP = Evan Papak
  - LWM = Leslie McIntire
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Prep
  - UJL8 = James Mertz
  - YZU9 = Garrett Leonard
- Batch Type: Analysis
  - JCG7 = Elena Hess
  - LHF4 = Diamond Boyer

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Client Sample ID: 250306012-01
Date Collected: 03/05/25 15:45
Date Received: 03/07/25 13:10

Lab Sample ID: 180-187525-1
Matrix: Solid
Percent Solids: 32.1

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		7.8		mg/Kg	☼		03/10/25 18:00	5
Nitrate as N	ND		7.8		mg/Kg	☼		03/10/25 18:00	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.0**		1.1		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Cadmium	**0.89**		0.27		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Calcium	**140000**	^2	540		mg/Kg	☼	03/13/25 02:44	03/13/25 17:03	10
Chromium	**39**		1.1		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Copper	**150**		1.1		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Lead	**35**		0.54		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Molybdenum	**5.3**		0.54		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Nickel	**24**		1.1		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Potassium	**2500**		110		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Selenium	**3.2**		1.1		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2
Zinc	**420**		81		mg/Kg	☼	03/13/25 02:44	03/13/25 17:01	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2	**17000**		8300		mg/Kg	☼	03/12/25 16:00	03/13/25 13:19	20
Ammonia, distilled (EPA 350.1)	**1500**		57		mg/Kg	☼	03/14/25 16:25	03/15/25 13:05	2
Total Solids (SM 2540G)	**32**		0.50		%			03/10/25 15:43	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	**4.1**		3.1		mg/Kg	☼		03/11/25 12:39	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-491629/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 491641

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			03/10/25 17:02	1
Nitrate as N	ND		0.50		mg/Kg			03/10/25 17:02	1

Lab Sample ID: LCS 180-491629/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 491641

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	12.0		mg/Kg		96	80 - 120
Nitrate as N	12.5	11.7		mg/Kg		94	80 - 120

Lab Sample ID: 180-187390-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 491641

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		12.9	12.1		mg/Kg	☼	94	80 - 120
Nitrate as N	ND		12.9	12.4		mg/Kg	☼	96	80 - 120

Lab Sample ID: 180-187390-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 491641

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		12.9	12.2		mg/Kg	☼	94	80 - 120	0	15
Nitrate as N	ND		12.9	12.5		mg/Kg	☼	96	80 - 120	1	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-616016/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 616864 — **Prep Batch: 616016**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Cadmium	ND		0.10		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Calcium	ND		40		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Chromium	ND		0.40		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Copper	ND		0.40		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Lead	ND		0.20		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Molybdenum	ND		0.20		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Nickel	ND		0.40		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Potassium	ND		40		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Selenium	ND		0.40		mg/Kg		03/13/25 02:44	03/13/25 15:51	2
Zinc	ND		30		mg/Kg		03/13/25 02:44	03/13/25 15:51	2

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-616016/2-A ^2
Matrix: Solid
Analysis Batch: 616864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616016

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	52.5		mg/Kg		105	87 - 114
Cadmium	5.00	5.41		mg/Kg		108	88 - 117
Calcium	500	524		mg/Kg		105	84 - 119
Chromium	50.0	52.1		mg/Kg		104	86 - 116
Copper	50.0	52.1		mg/Kg		104	84 - 115
Lead	5.00	5.29		mg/Kg		106	88 - 117
Molybdenum	5.00	5.48		mg/Kg		110	86 - 119
Nickel	50.0	52.0		mg/Kg		104	87 - 115
Potassium	500	525		mg/Kg		105	83 - 118
Selenium	10.0	10.2		mg/Kg		102	87 - 115
Zinc	50.0	51.9		mg/Kg		104	86 - 116

Lab Sample ID: 410-211087-B-39-A MS ^10
Matrix: Solid
Analysis Batch: 616864

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 616016

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	2.5		49.2	53.4		mg/Kg	☼	103	75 - 125
Cadmium	ND		4.92	5.08		mg/Kg	☼	94	75 - 125
Calcium	2000	4 FH F2	492	2270	4	mg/Kg	☼	58	75 - 125
Chromium	17		49.2	70.5		mg/Kg	☼	108	75 - 125
Copper	15		49.2	67.9		mg/Kg	☼	107	75 - 125
Lead	59	4 F2	4.92	87.4	4	mg/Kg	☼	581	75 - 125
Molybdenum	ND		4.92	5.39		mg/Kg	☼	109	75 - 125
Nickel	4.0		49.2	56.3		mg/Kg	☼	106	75 - 125
Potassium	580	FH F2	492	1660	FH	mg/Kg	☼	219	75 - 125
Selenium	ND		9.85	10.4		mg/Kg	☼	106	75 - 125
Zinc	ND	FL	49.2	ND	FL	mg/Kg	☼	72	75 - 125

Lab Sample ID: 410-211087-B-39-A MS ^2
Matrix: Solid
Analysis Batch: 616864

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 616016

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	3.3		49.2	55.3		mg/Kg	☼	106	75 - 125
Cadmium	0.58	FH F2	4.92	5.46		mg/Kg	☼	99	75 - 125
Calcium	2600	4 F2	492	2390	4	mg/Kg	☼	-53	75 - 125
Chromium	16	FH	49.2	72.1		mg/Kg	☼	114	75 - 125
Copper	19	FH F2	49.2	69.4		mg/Kg	☼	101	75 - 125
Lead	79	4 F2	4.92	90.1	4	mg/Kg	☼	230	75 - 125
Molybdenum	0.33	FH F2	4.92	5.63		mg/Kg	☼	108	75 - 125
Nickel	5.9	FH F2	49.2	58.0		mg/Kg	☼	106	75 - 125
Potassium	800	FH F2	492	1780	FH	mg/Kg	☼	199	75 - 125
Selenium	ND	FH	9.85	10.6		mg/Kg	☼	106	75 - 125
Zinc	66	FL F2	49.2	87.6	FL	mg/Kg	☼	44	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-211087-B-39-B MSD ^10 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 616864 — **Prep Batch: 616016**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	2.5		50.2	52.1		mg/Kg	☼	99	75 - 125	2	20
Cadmium	ND		5.02	5.37		mg/Kg	☼	98	75 - 125	6	20
Calcium	2000	4 FH F2	502	3660	FH F2	mg/Kg	☼	334	75 - 125	47	20
Chromium	17		50.2	70.5		mg/Kg	☼	106	75 - 125	0	20
Copper	15		50.2	69.6		mg/Kg	☼	109	75 - 125	3	20
Lead	59	4 F2	5.02	122	4 F2	mg/Kg	☼	1258	75 - 125	33	20
Molybdenum	ND		5.02	5.55		mg/Kg	☼	111	75 - 125	3	20
Nickel	4.0		50.2	58.2		mg/Kg	☼	108	75 - 125	3	20
Potassium	580	FH F2	502	2100	FH F2	mg/Kg	☼	302	75 - 125	23	20
Selenium	ND		10.0	9.91		mg/Kg	☼	99	75 - 125	5	20
Zinc	ND	FL	50.2	ND		mg/Kg	☼	82	75 - 125	7	20

Lab Sample ID: 410-211087-B-39-B MSD ^2 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 616864 — **Prep Batch: 616016**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	3.3		50.2	66.3		mg/Kg	☼	125	75 - 125	18	20
Cadmium	0.58	FH F2	5.02	6.96	FH F2	mg/Kg	☼	127	75 - 125	24	20
Calcium	2600	4 F2	502	4630	4 F2	mg/Kg	☼	395	75 - 125	64	20
Chromium	16	FH	50.2	87.2	FH	mg/Kg	☼	142	75 - 125	19	20
Copper	19	FH F2	50.2	87.9	FH F2	mg/Kg	☼	136	75 - 125	24	20
Lead	79	4 F2	5.02	153	4 F2	mg/Kg	☼	1476	75 - 125	52	20
Molybdenum	0.33	FH F2	5.02	7.17	FH F2	mg/Kg	☼	136	75 - 125	24	20
Nickel	5.9	FH F2	50.2	74.2	FH F2	mg/Kg	☼	136	75 - 125	24	20
Potassium	600	FH F2	502	2730	FH F2	mg/Kg	☼	386	75 - 125	42	20
Selenium	ND	FH	10.0	12.9	FH	mg/Kg	☼	127	75 - 125	19	20
Zinc	66	FL F2	50.2	113	F2	mg/Kg	☼	93	75 - 125	25	20

Lab Sample ID: 410-211087-I-39-A DU ^10 — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 616864 — **Prep Batch: 616016**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	2.5		2.36		mg/Kg	☼	5	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Calcium	2000	4 FH F2	9450	F3	mg/Kg	☼	131	20
Chromium	17		12.1	F3	mg/Kg	☼	36	20
Copper	15		9.89	F3	mg/Kg	☼	42	20
Lead	59	4 F2	118	F3	mg/Kg	☼	67	20
Molybdenum	ND		ND		mg/Kg	☼	NC	20
Nickel	4.0		3.42		mg/Kg	☼	16	20
Potassium	580	FH F2	483		mg/Kg	☼	19	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Zinc	ND	FL	ND		mg/Kg	☼	NC	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-211087-I-39-A DU ^2
Matrix: Solid
Analysis Batch: 616864

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 616016

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	3.3		2.40	F3	mg/Kg	☼	33	20
Cadmium	0.58	FH F2	0.389	F3	mg/Kg	☼	39	20
Calcium	2600	4 F2	10100	F3	mg/Kg	☼	117	20
Chromium	16	FH	12.4	F3	mg/Kg	☼	24	20
Copper	19	FH F2	10.6	F3	mg/Kg	☼	59	20
Lead	79	4 F2	124	F3	mg/Kg	☼	45	20
Molybdenum	0.33	FH F2	0.278		mg/Kg	☼	18	20
Nickel	5.9	FH F2	3.89	F3	mg/Kg	☼	41	20
Potassium	800	FH F2	544	F3	mg/Kg	☼	38	20
Selenium	ND	FH	ND		mg/Kg	☼	NC	20
Zinc	66	FL F2	31.8	F3	mg/Kg	☼	70	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-616183/2-A
Matrix: Solid
Analysis Batch: 616652

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 616183

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		03/12/25 16:00	03/13/25 12:08	1

Lab Sample ID: LCS 410-616183/1-A
Matrix: Solid
Analysis Batch: 616652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 616183

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	398	452		mg/Kg		114	70 - 130

Lab Sample ID: 460-321726-B-1-C MS
Matrix: Solid
Analysis Batch: 616652

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 616183

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	9100	4	1930	7740	4	mg/Kg	☼	-73	70 - 130

Lab Sample ID: 460-321726-B-1-B DU
Matrix: Solid
Analysis Batch: 616652

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 616183

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	9100	4	8860		mg/Kg	☼	3	20

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-491938/4-A
Matrix: Solid
Analysis Batch: 491955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491938

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		11		mg/Kg		03/14/25 16:25	03/15/25 12:50	1

Method: EPA 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 180-491938/5-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 491955 — **Prep Batch: 491938**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	95.2	101		mg/Kg		106	90 - 110

Lab Sample ID: 180-186950-D-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 491955 — **Prep Batch: 491938**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	ND	FL F2	148	131	FL	mg/Kg	☼	82	90 - 110

Lab Sample ID: 180-186950-D-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 491955 — **Prep Batch: 491938**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia, distilled	ND	FL F2	156	163	F2	mg/Kg	☼	99	90 - 110	22	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-491673/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 491704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			03/11/25 12:32	1

Lab Sample ID: LCS 180-491673/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 491704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	20.9		mg/Kg		105	90 - 110

Lab Sample ID: 180-187525-1 MS — **Client Sample ID: 250306012-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 491704

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	4.1		62.1	60.5		mg/Kg	☼	91	90 - 110

Lab Sample ID: 180-187525-1 MSD — **Client Sample ID: 250306012-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 491704

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	4.1		62.2	60.9		mg/Kg	☼	91	90 - 110	1	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-187525-1 DU
Matrix: Solid
Analysis Batch: 491646

Client Sample ID: 250306012-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	32			28.5	F3	%				12	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

HPLC/IC

Leach Batch: 491629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Soluble	Solid	DI Leach	
MB 180-491629/23-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-491629/24-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-187390-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
180-187390-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 491641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Soluble	Solid	EPA 9056A	491629
MB 180-491629/23-A	Method Blank	Soluble	Solid	EPA 9056A	491629
LCS 180-491629/24-A	Lab Control Sample	Soluble	Solid	EPA 9056A	491629
180-187390-A-1-B MS	Matrix Spike	Soluble	Solid	EPA 9056A	491629
180-187390-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	491629

Metals

Prep Batch: 616016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Total/NA	Solid	3050B	
MB 410-616016/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-616016/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
410-211087-B-39-A MS ^10	Matrix Spike	Total/NA	Solid	3050B	
410-211087-B-39-A MS ^2	Matrix Spike	Total/NA	Solid	3050B	
410-211087-B-39-B MSD ^1(	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-211087-B-39-B MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-211087-I-39-A DU ^10	Duplicate	Total/NA	Solid	3050B	
410-211087-I-39-A DU ^2	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 616864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Total/NA	Solid	6020B	616016
180-187525-1	250306012-01	Total/NA	Solid	6020B	616016
MB 410-616016/1-A ^2	Method Blank	Total/NA	Solid	6020B	616016
LCS 410-616016/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	616016
410-211087-B-39-A MS ^10	Matrix Spike	Total/NA	Solid	6020B	616016
410-211087-B-39-A MS ^2	Matrix Spike	Total/NA	Solid	6020B	616016
410-211087-B-39-B MSD ^1(	Matrix Spike Duplicate	Total/NA	Solid	6020B	616016
410-211087-B-39-B MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	6020B	616016
410-211087-I-39-A DU ^10	Duplicate	Total/NA	Solid	6020B	616016
410-211087-I-39-A DU ^2	Duplicate	Total/NA	Solid	6020B	616016

General Chemistry

Analysis Batch: 491646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Total/NA	Solid	SM 2540G	
180-187525-1 DU	250306012-01	Total/NA	Solid	SM 2540G	

Leach Batch: 491673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Soluble	Solid	DI Leach	
MB 180-491673/1-A	Method Blank	Soluble	Solid	DI Leach	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25

Job ID: 180-187525-1
SDG: 250306012

General Chemistry (Continued)

Leach Batch: 491673 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-491673/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-187525-1 MS	250306012-01	Soluble	Solid	DI Leach	
180-187525-1 MSD	250306012-01	Soluble	Solid	DI Leach	

Analysis Batch: 491704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Soluble	Solid	EPA 353.2	491673
MB 180-491673/1-A	Method Blank	Soluble	Solid	EPA 353.2	491873
LCS 180-491873/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	491673
180-187525-1 MS	250306012-01	Soluble	Solid	EPA 353.2	491873
180-187525-1 MSD	250308012-01	Soluble	Solid	EPA 353.2	491673

Prep Batch: 491938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Total/NA	Solid	350.1	
MB 180-491938/4-A	Method Blank	Total/NA	Solid	350.1	
LCS 180-491938/5-A	Lab Control Sample	Total/NA	Solid	350.1	
180-186950-D-2-B MS	Matrix Spike	Total/NA	Solid	350.1	
180-186950-D-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	350.1	

Analysis Batch: 491955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Total/NA	Solid	EPA 350.1	491938
MB 180-491938/4-A	Method Blank	Total/NA	Solid	EPA 350.1	491938
LCS 180-491938/5-A	Lab Control Sample	Total/NA	Solid	EPA 350.1	491938
180-186950-D-2-B MS	Matrix Spike	Total/NA	Solid	EPA 350.1	491938
180-186950-D-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 350.1	491938

Prep Batch: 616183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Total/NA	Solid	351.2	
MB 410-616183/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-616183/1-A	Lab Control Sample	Total/NA	Solid	351.2	
460-321726-B-1-C MS	Matrix Spike	Total/NA	Solid	351.2	
460-321726-B-1-B DU	Duplicate	Total/NA	Solid	351.2	

Analysis Batch: 616652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187525-1	250306012-01	Total/NA	Solid	351.2	616183
MB 410-616183/2-A	Method Blank	Total/NA	Solid	351.2	616183
LCS 410-616183/1-A	Lab Control Sample	Total/NA	Solid	351.2	616183
460-321726-B-1-C MS	Matrix Spike	Total/NA	Solid	351.2	616183
460-321726-B-1-B DU	Duplicate	Total/NA	Solid	351.2	616183

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250306012**

Additional Information : **Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, NH3, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn			
							Number of Containers					
250306012-01	3/5/25	1545	S	N	C	***5 DAY TURN AROUND***	1	1	1			

180-187525 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	3-7-25	0945	[signature]	Eurofins Pgh	03/07/25	0945
[signature]	EPH NE	03/07/25	1310	[signature]	EPH NE	3/7/25	1310

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results. PADEP Accredited test methods requred.

COC Analyst Cooler Review: Initials: [initials] Date: 3-7-25 Supervisor Review: Initials: [initials] Date: 3-6-25

Page 1 of 1

#25 CF-0.6

B13 2.4/1.8

B14 2.8/2.2

180-187525 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-534558.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-187525-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/20/2025			
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Monthly Limed Sludge 3/2/25, 3/4/25, 3/5/25	Project #: 18007110			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351,2/351.2_Prop Nitrogen, Total Kjeldahl	6020B/3050B (MOD) PPL Metals by ICP/MS 6020B	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X			X	
250306012-01 (180-187525-1)	3/5/25	15:45 Eastern	G	Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/10/25 1330	Company: ELLE	Received by:	Date/Time: 3/10/25 1330	Company: ELLE
Relinquished by:	Date/Time: 3/10/25 1945	Company: ELLE	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 3/10/25 1945	Company: ELLE

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R 2.9 C 2.9

Ver: 10/10/2024

3/18/2025

ICOC No:
180-534558

Containers

Count	Container Type	Preservative
1	Soil jar 16oz - clear glass	None

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-187525-1
SDG Number: 250306012

Login Number: 187525
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-187525-1
SDG Number: 250306012

Login Number: 187525
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 03/10/25 03:58 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250313012 **Sample Date:** 3/13/2025

Sample ID Number: 250313012-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	3/18/2025	See attached report	ug/Kg Dry	51		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	3/18/2025	33	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCB/solids

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

Larissa Hawk

3-27-25

Date

Printed Date

Thursday, March 27, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 3/20/2025 11:33:44 PM

JOB DESCRIPTION

Limed Sludge Monthly
250313012

JOB NUMBER

180-187789-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
3/20/2025 11:33:44 PM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 15

Job Narrative
180-187789-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 3/14/2025 1:20 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C.

PCBs
Method 8082A: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 250313012-01 (180-187789-1), (LCS 180-491967/2-A), (MB 180-491967/1-A), (180-187789-A-1-A MS) and (180-187789-A-1-B MSD).6215174

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 250313012-01 (180-187789-1), (LCS 180-491967/2-A), (MB 180-491967/1-A), (180-187789-A-1-A MS) and (180-187789-A-1-B MSD).6239381
4297660

Method 8082A: The continuing calibration verification (CCV) associated with 180-492024 recovered low and outside the control limits for 1016 on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated sample is: (CCVIS 180-492024/37).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-187789-1
SDG: 250313012

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-187789-1
SDG: 250313012

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-187789-1	250313012-01	Solid	03/13/25 08:13	03/14/25 13:20

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-187789-1
SDG: 250313012

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-187789-1
SDG: 250313012

Client Sample ID: 250313012-01
Date Collected: 03/13/25 08:13
Date Received: 03/14/25 13:20

Lab Sample ID: 180-187789-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			492077	03/18/25 13:47	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250313012-01
Date Collected: 03/13/25 08:13
Date Received: 03/14/25 13:20

Lab Sample ID: 180-187789-1
Matrix: Solid
Percent Solids: 32.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	491967	03/17/25 06:32	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 uL	1 uL	492024	03/18/25 12:20	JMO	EET PIT
	Instrument ID: CHGC16									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

MKK = Mary Kanny

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-187789-1
SDG: 250313012

Client Sample ID: 250313012-01
Date Collected: 03/13/25 08:13
Date Received: 03/14/25 13:20

Lab Sample ID: 180-187789-1
Matrix: Solid
Percent Solids: 32.7

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	^c	51		ug/Kg	☼	03/17/25 06:32	03/18/25 12:20	1
PCB-1221	ND		51		ug/Kg	☼	03/17/25 06:32	03/18/25 12:20	1
PCB-1232	ND		51		ug/Kg	☼	03/17/25 06:32	03/18/25 12:20	1
PCB-1242	ND		51		ug/Kg	☼	03/17/25 06:32	03/18/25 12:20	1
PCB-1248	ND		51		ug/Kg	☼	03/17/25 06:32	03/18/25 12:20	1
PCB-1254	ND		51		ug/Kg	☼	03/17/25 06:32	03/18/25 12:20	1
PCB-1260	ND		51		ug/Kg	☼	03/17/25 06:32	03/18/25 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*72*		*60 - 135*	*03/17/25 06:32*	*03/18/25 12:20*	*1*
Tetrachloro-m-xylene (Surr)	*69*		*60 - 135*	*03/17/25 06:32*	*03/18/25 12:20*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*57 - 146*	*03/17/25 06:32*	*03/18/25 12:20*	*1*
DCB Decachlorobiphenyl (Surr)	*75*		*57 - 146*	*03/17/25 06:32*	*03/18/25 12:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**33**		0.50		%			03/18/25 13:47	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-187789-1
SDG: 250313012

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-491967/1-A
Matrix: Solid
Analysis Batch: 492024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 491967

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		03/17/25 06:32	03/18/25 11:43	1
PCB-1221	ND		17		ug/Kg		03/17/25 06:32	03/18/25 11:43	1
PCB-1232	ND		17		ug/Kg		03/17/25 06:32	03/18/25 11:43	1
PCB-1242	ND		17		ug/Kg		03/17/25 06:32	03/18/25 11:43	1
PCB-1248	ND		17		ug/Kg		03/17/25 06:32	03/18/25 11:43	1
PCB-1254	ND		17		ug/Kg		03/17/25 06:32	03/18/25 11:43	1
PCB-1260	ND		17		ug/Kg		03/17/25 06:32	03/18/25 11:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*88*		*60 - 135*	*03/17/25 06:32*	*03/18/25 11:43*	*1*
Tetrachloro-m-xylene (Surr)	*92*		*60 - 135*	*03/17/25 06:32*	*03/18/25 11:43*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*57 - 146*	*03/17/25 06:32*	*03/18/26 11:43*	*1*
DCB Decachlorobiphenyl (Surr)	*96*		*57 - 146*	*03/17/25 06:32*	*03/18/25 11:43*	*1*

Lab Sample ID: LCS 180-491967/2-A
Matrix: Solid
Analysis Batch: 492024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 491967

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1200		ug/Kg		90	48 - 132
PCB-1260	1330	1100		ug/Kg		83	45 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*96*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*97*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*93*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*94*		*57 - 146*

Lab Sample ID: 180-187789-1 MS
Matrix: Solid
Analysis Batch: 492024

Client Sample ID: 250313012-01
Prep Type: Total/NA
Prep Batch: 491967

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND	^c	4050	2970		ug/Kg	☼	73	48 - 132
PCB-1260	ND		4050	2810		ug/Kg	☼	69	45 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*72*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*72*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*78*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*78*		*57 - 146*

Lab Sample ID: 180-187789-1 MSD
Matrix: Solid
Analysis Batch: 492024

Client Sample ID: 250313012-01
Prep Type: Total/NA
Prep Batch: 491967

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND	^c	4000	3020		ug/Kg	☼	76	48 - 132	2	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-187789-1 MSD — **Client Sample ID: 250313012-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 492024 — **Prep Batch: 491967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		4000	2920		ug/Kg	☼	73	45 - 128	4	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*81*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*77*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*85*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*84*		*57 - 146*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-187789-1 DU — **Client Sample ID: 250313012-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 492077

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	33			30.8		%				6	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-187789-1
SDG: 250313012

GC Semi VOA

Prep Batch: 491967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187789-1	250313012-01	Total/NA	Solid	3541	
MB 180-491967/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-491967/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-187789-1 MS	250313012-01	Total/NA	Solid	3541	
180-187789-1 MSD	250313012-01	Total/NA	Solid	3541	

Analysis Batch: 492024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187789-1	250313012-01	Total/NA	Solid	EPA 8082A	491967
MB 180-491967/1-A	Method Blank	Total/NA	Solid	EPA 8082A	491967
LCS 180-491967/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	491987
180-187789-1 MS	250313012-01	Total/NA	Solid	EPA 8082A	491967
180-187789-1 MSD	250313012-01	Total/NA	Solid	EPA 8082A	491967

General Chemistry

Analysis Batch: 492077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187789-1	250313012-01	Total/NA	Solid	SM 2540G	
180-187789-1 DU	250313012-01	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250313012**

Additional Information : Limed Sludge Monthly

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers	Tests to be Performed: Total Solids, PCB		J9	3.2		
										#25	-0.6		
											2.2		
250313012-01	3/13/25	0813	S	N	G	** 5 day rush**	1						

180-187789 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	03-14-25	0940	[signature]	Eurofins Pgh	3-14-25	9:40
[signature]	EPIIM	3-14-25	1320	D Watson	EPIIM	3-14-25	1320
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: YH Date: 3/14/25

Supervisor Review: Initials: SJ Date: 3-13-25

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-187789-1
SDG Number: 250313012

Login Number: 187789
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250404010 **Sample Date:** 4/3/2025

Sample ID Number: 250404010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	Contract Lab	EurofinsPittsburgh	4/9/2025	890	mg/Dry Kg	52		
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsPittsburgh	4/9/2025	35000	mg/kg dry	9500	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	4/7/2025	8.1	mg/kg dry	3.0		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	4/7/2025	6.0	mg/kg dry	3.0	FL	MS and/or MSD recovery below control limits.
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	4/7/2025	4.4	mg/kg dry	3.0		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	4/7/2025	34	%	0.50		
Metals								
Arsenic	Contract Lab	EurofinsLancaster	4/17/2025	5.7	mg/kg dry	1.1		
Cadmium	Contract Lab	EurofinsLancaster	4/17/2025	0.66	mg/kg dry	0.28		
Calcium	Contact Lab	EurofinsLancaster	4/21/2025	98000	mg/kg dry	110		
Chromium	Contract Lab	EurofinsLancaster	4/17/2025	31	mg/kg dry	1.1		

Printed Date
Thursday, May 1, 2025

3300 Preble Avenue
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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250404010 **Sample Date:** 4/3/2025

Sample ID Number: 250404010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Copper	Contract Lab	EurofinsLancaster	4/17/2025	190	mg/kg dry	1.1		
Lead	Contract Lab	EurofinsLancaster	4/17/2025	34	mg/kg dry	0.57	^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits
Mercury, Total	EPA 7471B	jweaver	4/17/2025	0.24	mg/Dry Kg	0.17		
Molybdenum	Contract Lab	EurofinsLancaster	4/17/2025	8.3	mg/kg dry	0.57		
Nickel	Contract Lab	EurofinsLancaster	4/17/2025	18	mg/kg dry	1.1	^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits
Phosphorus, Total	Contract Lab ~~EPA6010C~~ RLH 5-1-25	RJLeeGroup	4/9/2025	7970	mg/kg	48.3		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	4/21/2025	2100	mg/kg dry	110		
Selenium	Contract Lab	EurofinsLancaster	4/17/2025	3.3	mg/kg dry	1.1		
Zinc	Contract Lab	EurofinsLancaster	4/17/2025	470	mg/kg dry	85		

Printed Date
Thursday, May 1, 2025

3300 Preble Avenue
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ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250404010 **Sample Date:** 4/3/2025

Sample ID Number: 250404010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

4/1/25, 4/2/25, 4/3/25 Composite

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hawk

5-1-25

Date

Printed Date
Thursday, May 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250404010 **Sample Date:** 4/3/2025

Sample ID Number: 250404010-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	tbradley2	4/8/2025	2199.71	mg/Dry Kg	12	S	MS and RPD passed. MSD recovered above acceptance criteria. Sample appears to not be homogeneous in nature.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	tbradley2	4/8/2025	717.10	mg/Wet Kg	12	S	MS and RPD passed. MSD recovered above acceptance criteria. Sample appears to not be homogeneous in nature.

Printed Date
Thursday, May 1, 2025

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Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250404010 **Sample Date:** 4/3/2025

Sample ID Number: 250404010-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
~~R~~	~~Rejected, result unusable~~ not applicable LLH 5-1-25
S	Matrix spike % recovery outside acceptable range

Comments:

4/1/25, 4/2/25, 4/3/25 Composite

Released by:

Lorraine Heaver

5-1-25

Date

Printed Date
Thursday, May 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250404010 **Sample Date:** 4/3/2025

Sample ID Number: 250404010-01C **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Fixed Solids	SM 2540G - 2015	lfalck	4/29/2025	44.56	%		HT	Sample was re-analyzed outside of hold time, due to failed blank in previous batch.
Percent Total Solids	SM 2540G - 2015	lfalck	4/29/2025	34.0	%		HT	Sample was re-analyzed outside of hold time, due to failed blank in previous batch.
Percent Volatile Solids	SM 2540G - 2015	lfalck	4/29/2025	55.44	%		HT	Sample was re-analyzed outside of hold time, due to failed blank in previous batch.

Data Qualifier	Data Qualifier Description
HT	Outside of Holding Time

Comments:

4/1/25, 4/2/25, 4/3/25 Composite

Released by:

Lorraine Hawk

5-1-25

Date

Printed Date
Thursday, May 1, 2025

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA070420250020
Samples Received: April 7, 2025
Report Date: April 14, 2025
Client Project: 250404010
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250404010-01	PA070420250020-001	04/03/2025, 08:00 PM	Phosphorus	0.797	7970	0.00483	48.3	04/09/2025	P

Comments: Sample results reported on a dried weight basis.

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00336, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10964)

A : AIHA LAP, LLC Accredited (Lab ID 100364)

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part of any of the above scopes of accreditations

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

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JOB DESCRIPTION

Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25
250404010

JOB NUMBER

180-188719-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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4/21/2025 3:48:37 PM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 16
Chain of Custody 18
Receipt Checklists 21

Job Narrative
180-188719-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 4/4/2025 12:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: The following sample was diluted due to the nature of the sample matrix: 250404010-01 (180-188719-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 353.2 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-493325 and analytical batch 180-493359 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
FH	MS and/or MSD recovery above control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-188719-1	250404010-01	Solid	04/03/25 20:00	04/04/25 12:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Client Sample ID: 250404010-01 — **Lab Sample ID: 180-188719-1**
Date Collected: 04/03/25 20:00 — **Matrix: Solid**
Date Received: 04/04/25 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			493345	04/07/25 11:30	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250404010-01 — **Lab Sample ID: 180-188719-1**
Date Collected: 04/03/25 20:00 — **Matrix: Solid**
Date Received: 04/04/25 12:30 — **Percent Solids: 33.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			10.0763 g	100 mL	493391	04/07/25 13:39	ERP	EET PIT
Soluble	Analysis	EPA 9056A		2	1 mL	1 mL	493352	04/07/25 20:50	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3050B			1.05 g	100 mL	630556	04/14/25 21:45	UAMX	ELLE
Total/NA	Analysis	6020B		2			633381	04/21/25 14:14	SAM2	ELLE
	Instrument ID: E08 - 30647									
Total/NA	Prep	3050B			1.05 g	100 mL	630556	04/14/25 21:45	UAMX	ELLE
Total/NA	Analysis	6020B		2			632367	04/17/25 18:59	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	351.2			.25 g	25 mL	627707	04/08/25 10:04	NLE3	ELLE
Total/NA	Analysis	351.2		20			628384	04/09/25 11:56	JCG7	ELLE
	Instrument ID: 5791									
Soluble	Leach	DI Leach			10.01 g	100.0 mL	493325	04/07/25 07:45	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			493359	04/07/25 11:46	RSK	EET PIT
	Instrument ID: ASTORIA2									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7056

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - ERP = Evan Papak
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Prep
  - NLE3 = Thomas Schmertz
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - JCG7 = Elena Hess
  - LHF4 = Diamond Boyer
  - SAM2 = Matthew Olley

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Client Sample ID: 250404010-01
Date Collected: 04/03/25 20:00
Date Received: 04/04/25 12:30

Lab Sample ID: 180-188719-1
Matrix: Solid
Percent Solids: 33.6

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	4.4		3.0		mg/Kg	☼		04/07/25 20:50	2
Nitrate as N	8.1		3.0		mg/Kg	☼		04/07/25 20:50	2

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.7		1.1		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2
Cadmium	0.66		0.28		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2
Calcium	98000		110		mg/Kg	☼	04/14/25 21:45	04/21/25 14:14	2
Chromium	31		1.1		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2
Copper	190		1.1		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2
Lead	34	^2	0.57		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2
Molybdenum	8.3		0.57		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2
Nickel	18	^2	1.1		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2
Potassium	2100		110		mg/Kg	☼	04/14/25 21:45	04/21/25 14:14	2
Selenium	3.3		1.1		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2
Zinc	470		85		mg/Kg	☼	04/14/25 21:45	04/17/25 18:59	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	35000	4	9500		mg/Kg	☼	04/08/25 10:04	04/09/25 11:56	20
Total Solids (SM 2540G)	34		0.50		%			04/07/25 11:30	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	6.0	FL	3.0		mg/Kg	☼		04/07/25 11:46	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-493391/1-A
Matrix: Solid
Analysis Batch: 493352

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			04/07/25 17:11	1
Nitrate as N	ND		0.50		mg/Kg			04/07/25 17:11	1

Lab Sample ID: LCS 180-493391/2-A
Matrix: Solid
Analysis Batch: 493352

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	11.7		mg/Kg		93	80 - 120
Nitrate as N	12.5	11.4		mg/Kg		91	80 - 120

Lab Sample ID: 180-188234-B-8-E MS
Matrix: Solid
Analysis Batch: 493352

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		15.8	13.9		mg/Kg	☼	88	80 - 120
Nitrate as N	0.97		15.8	16.1		mg/Kg	☼	95	80 - 120

Lab Sample ID: 180-188234-B-8-F MSD
Matrix: Solid
Analysis Batch: 493352

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		15.8	14.4		mg/Kg	☼	91	80 - 120	4	15
Nitrate as N	0.97		15.8	15.8		mg/Kg	☼	94	80 - 120	2	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-630556/1-A ^2
Matrix: Solid
Analysis Batch: 632367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 630556

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Cadmium	ND		0.10		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Calcium	ND		40		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Chromium	ND		0.40		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Copper	ND		0.40		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Lead	ND		0.20		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Molybdenum	ND		0.20		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Nickel	ND		0.40		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Selenium	ND		0.40		mg/Kg		04/14/25 21:45	04/17/25 17:41	2
Zinc	ND		30		mg/Kg		04/14/25 21:45	04/17/25 17:41	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-630556/1-A ^2
Matrix: Solid
Analysis Batch: 632849

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 630556

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	ND		40		mg/Kg		04/14/25 21:45	04/18/25 16:53	2

Lab Sample ID: LCS 410-630556/2-A ^2
Matrix: Solid
Analysis Batch: 632367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 630556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	55.1		mg/Kg		110	87 - 114
Cadmium	5.00	5.28		mg/Kg		106	88 - 117
Calcium	500	535		mg/Kg		107	84 - 119
Chromium	50.0	55.1		mg/Kg		110	86 - 116
Copper	50.0	54.3		mg/Kg		109	84 - 115
Lead	5.00	5.32		mg/Kg		106	88 - 117
Molybdenum	5.00	5.69		mg/Kg		114	86 - 119
Nickel	50.0	53.2		mg/Kg		106	87 - 115
Selenium	10.0	9.33		mg/Kg		93	87 - 115
Zinc	50.0	52.8		mg/Kg		106	86 - 116

Lab Sample ID: LCS 410-630556/2-A ^2
Matrix: Solid
Analysis Batch: 632849

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 630556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Potassium	500	473		mg/Kg		95	83 - 118

Lab Sample ID: 460-323832-H-3-B MS ^10
Matrix: Solid
Analysis Batch: 632367

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 630556

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	58	FH	57.3	159	FH	mg/Kg	☼	176	75 - 125
Chromium	24	FH	57.3	103	FH	mg/Kg	☼	136	75 - 125
Molybdenum	3.4		5.73	8.46		mg/Kg	☼	89	75 - 125
Nickel	22		57.3	85.7		mg/Kg	☼	110	75 - 125
Selenium	7.0		11.5	16.0		mg/Kg	☼	79	75 - 125
Zinc	460	4	57.3	733	4	mg/Kg	☼	470	75 - 125

Lab Sample ID: 460-323832-H-3-B MS ^2
Matrix: Solid
Analysis Batch: 632367

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 630556

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	59	FH	57.3	160	FH	mg/Kg	☼	176	75 - 125
Chromium	22	FH	57.3	97.4	FH	mg/Kg	☼	131	75 - 125
Molybdenum	2.8		5.73	8.50		mg/Kg	☼	100	75 - 125
Nickel	22		57.3	85.1		mg/Kg	☼	110	75 - 125
Selenium	6.5		11.5	17.5		mg/Kg	☼	96	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-323832-H-3-C MSD ^10
Matrix: Solid
Analysis Batch: 632367

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 630556

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	58	FH	55.4	146	FH	mg/Kg	☼	160	75 - 125	8	20
Chromium	24	FH	55.4	101	FH	mg/Kg	☼	138	75 - 125	2	20
Lead	560	4 F2	5.54	1410	4 F2	mg/Kg	☼	15215	75 - 125	58	20
Molybdenum	3.4		5.54	9.28		mg/Kg	☼	107	75 - 125	9	20
Nickel	22		55.4	79.0		mg/Kg	☼	102	75 - 125	6	20
Selenium	7.0		11.1	16.3		mg/Kg	☼	84	75 - 125	2	20
Zinc	460	4	55.4	646	4	mg/Kg	☼	331	75 - 125	13	20

Lab Sample ID: 460-323832-H-3-C MSD ^2
Matrix: Solid
Analysis Batch: 632367

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 630556

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	59	FH	55.4	140	FH	mg/Kg	☼	145	75 - 125	14	20
Chromium	22	FH	55.4	99.4	FH	mg/Kg	☼	139	75 - 125	2	20
Molybdenum	2.8		5.54	8.84		mg/Kg	☼	110	75 - 125	4	20
Nickel	22		55.4	74.9		mg/Kg	☼	96	75 - 125	13	20
Selenium	6.5		11.1	16.9		mg/Kg	☼	94	75 - 125	3	20

Lab Sample ID: 460-323832-H-3-A DU ^10
Matrix: Solid
Analysis Batch: 632367

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 630556

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	58	FH	46.7	F3	mg/Kg	☼	21	20
Chromium	24	FH	23.7		mg/Kg	☼	3	20
Copper	240	^5- 4	224		mg/Kg	☼	6	20
Lead	560	4 F2	636		mg/Kg	☼	12	20
Molybdenum	3.4		2.04	F3	mg/Kg	☼	49	20
Nickel	22		24.2		mg/Kg	☼	8	20
Selenium	7.0		4.54	F3	mg/Kg	☼	42	20
Zinc	460	4	409		mg/Kg	☼	12	20

Lab Sample ID: 460-323832-H-3-A DU ^2
Matrix: Solid
Analysis Batch: 632367

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 630556

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	59	FH	51.8		mg/Kg	☼	13	20
Cadmium	1.7	^5-	1.83		mg/Kg	☼	10	20
Chromium	22	FH	24.9		mg/Kg	☼	11	20
Copper	240	^5- 4	215		mg/Kg	☼	12	20
Molybdenum	2.8		2.24	F3	mg/Kg	☼	21	20
Nickel	22		22.2		mg/Kg	☼	2	20
Selenium	6.5		4.70	F3	mg/Kg	☼	32	20
Zinc	450	E 4	417		mg/Kg	☼	7	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-627707/2-A
Matrix: Solid
Analysis Batch: 628384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 627707

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		04/08/25 10:04	04/09/25 10:39	1

Lab Sample ID: LCS 410-627707/1-A
Matrix: Solid
Analysis Batch: 628384

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 627707

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	401	319		mg/Kg		80	70 - 130

Lab Sample ID: 180-188719-1 MS
Matrix: Solid
Analysis Batch: 628384

Client Sample ID: 250404010-01
Prep Type: Total/NA
Prep Batch: 627707

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	35000	4	1030	32400	4	mg/Kg	☼	-237	70 - 130

Lab Sample ID: 180-188719-1 DU
Matrix: Solid
Analysis Batch: 628384

Client Sample ID: 250404010-01
Prep Type: Total/NA
Prep Batch: 627707

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	35000	4	32000		mg/Kg	☼	8	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-493325/1-A
Matrix: Solid
Analysis Batch: 493359

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			04/07/25 11:43	1

Lab Sample ID: LCS 180-493325/2-A
Matrix: Solid
Analysis Batch: 493359

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	21.8		mg/Kg		109	90 - 110

Lab Sample ID: 180-188719-1 MS
Matrix: Solid
Analysis Batch: 493359

Client Sample ID: 250404010-01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	6.0	FL	59.4	53.3	FL	mg/Kg	☼	80	90 - 110

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 180-188719-1 MSD
Matrix: Solid
Analysis Batch: 493359

Client Sample ID: 250404010-01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	6.0	FL	59.4	55.5	FL	mg/Kg	☼	83	90 - 110	4	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-188719-1 DU
Matrix: Solid
Analysis Batch: 493345

Client Sample ID: 250404010-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	34			33.9		%				0.8	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

HPLC/IC

Analysis Batch: 493352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Soluble	Solid	EPA 9056A	493391
MB 180-493391/1-A	Method Blank	Soluble	Solid	EPA 9056A	493391
LCS 180-493391/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	493391
180-188234-B-8-E MS	Matrix Spike	Soluble	Solid	EPA 9056A	493391
180-188234-B-8-F MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	493391

Leach Batch: 493391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Soluble	Solid	DI Leach	
MB 180-493391/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-493391/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-188234-B-8-E MS	Matrix Spike	Soluble	Solid	DI Leach	
180-188234-B-8-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Metals

Prep Batch: 630556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Total/NA	Solid	3050B	
MB 410-630556/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-630556/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
460-323832-H-3-B MS ^10	Matrix Spike	Total/NA	Solid	3050B	
460-323832-H-3-B MS ^2	Matrix Spike	Total/NA	Solid	3050B	
460-323832-H-3-C MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	3050B	
460-323832-H-3-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	3050B	
460-323832-H-3-A DU ^10	Duplicate	Total/NA	Solid	3050B	
460-323832-H-3-A DU ^2	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 632367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Total/NA	Solid	6020B	630556
MB 410-630556/1-A ^2	Method Blank	Total/NA	Solid	6020B	630556
LCS 410-630556/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	630556
460-323832-H-3-B MS ^10	Matrix Spike	Total/NA	Solid	6020B	630556
460-323832-H-3-B MS ^2	Matrix Spike	Total/NA	Solid	6020B	630556
460-323832-H-3-C MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	6020B	630556
460-323832-H-3-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	6020B	630556
460-323832-H-3-A DU ^10	Duplicate	Total/NA	Solid	6020B	630556
460-323832-H-3-A DU ^2	Duplicate	Total/NA	Solid	6020B	630556

Analysis Batch: 632849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-630556/1-A ^2	Method Blank	Total/NA	Solid	6020B	630556
LCS 410-630556/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	630556

Analysis Batch: 633381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Total/NA	Solid	6020B	630556

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-1
SDG: 250404010

General Chemistry

Leach Batch: 493325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Soluble	Solid	DI Leach	
MB 180-493325/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-493325/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-188719-1 MS	250404010-01	Soluble	Solid	DI Leach	
180-188719-1 MSD	250404010-01	Soluble	Solid	DI Leach	

Analysis Batch: 493345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Total/NA	Solid	SM 2540G	
180-188719-1 DU	250404010-01	Total/NA	Solid	SM 2540G	

Analysis Batch: 493359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Soluble	Solid	EPA 353.2	493325
MB 180-493325/1-A	Method Blank	Soluble	Solid	EPA 353.2	493325
LCS 180-493325/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	493325
180-188719-1 MS	250404010-01	Soluble	Solid	EPA 353.2	493325
180-188719-1 MSD	250404010-01	Soluble	Solid	EPA 353.2	493325

Prep Batch: 627707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Total/NA	Solid	351.2	
MB 410-627707/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-627707/1-A	Lab Control Sample	Total/NA	Solid	351.2	
180-188719-1 MS	250404010-01	Total/NA	Solid	351.2	
180-188719-1 DU	250404010-01	Total/NA	Solid	351.2	

Analysis Batch: 628384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Total/NA	Solid	351.2	627707
MB 410-627707/2-A	Method Blank	Total/NA	Solid	351.2	627707
LCS 410-627707/1-A	Lab Control Sample	Total/NA	Solid	351.2	627707
180-188719-1 MS	250404010-01	Total/NA	Solid	351.2	627707
180-188719-1 DU	250404010-01	Total/NA	Solid	351.2	627707

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250404010**

Additional Information : **Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn	NH3(*) (Savannah GA Lab)		
							Number of Containers					
250404010-01	4/3/25	2000	S	N	C	5 DAY TURN AROUND	1	1	1	1		
						*Requesting to receive a Level IV Data Package for the Solid Monthly Ammonia Split Sample						
								J1	2.8			
									-0.4			
								#25	2.4			

180-188719 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	4-4-25	0935		Eurofins Pgh	4-4-25	0935
	EPIINE	4-4-25	10:30		EPIINE	4-4-25	1230
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results. PADEP Accredited test methods required.

COC Analyst Cooler Review: Initials: _____ Date: 4/4/25

Supervisor Review: Initials: _____ Date: 4-4-25

Page 1 of 1

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-536156.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-188719-1
Address: 2425 New Holland Pike,	Due Date Requested: 4/17/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_Prep Nitrogen, Total Kjeldahl	6020B/3050B (MOD) PPL Metals by ICP/MS 6020B	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
250404010-01 (180-188719-1)	4/3/25	20:00 Eastern	G	Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	4/7/25 1330	EPHANE	Clarence Williams	4/7/25 1330	ET/E
Clarence Williams	4/7/25 1900	ET/E			
			[signature]	4/7/25 1900	[illegible]

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R 3.1 C3.0

Ver: 10/10/2024

4/21/2025

ICOC No:
180-536156

Containers

Count	Container Type	Preservative
1	Soil jar 16oz - clear glass	None

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-188719-1
SDG Number: 250404010

Login Number: 188719
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not eppear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-188719-1
SDG Number: 250404010

Login Number: 188719
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 04/07/25 09:26 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 4/9/2025 3:48:30 PM

JOB DESCRIPTION

Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25
250404010

JOB NUMBER

180-188719-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
4/9/2025 3:48:30 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 12
Chain of Custody 13
Receipt Checklists 14

Job Narrative
180-188719-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 4/4/2025 12:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

General Chemistry
Method 350.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250404010-01 (180-188719-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-2
SDG: 250404010

Qualifiers

General Chemistry

Qualifier	Qualifier Description
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-2
SDG: 250404010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-2
SDG: 250404010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-188719-1	250404010-01	Solid	04/03/25 20:00	04/04/25 12:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-2
SDG: 250404010

Method	Method Description	Protocol	Laboratory
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
350.1	Distillation, Ammonia	EPA	EET PIT

Protocol References:

EPA = US Environmental Protection Agency

Leboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-2
SDG: 250404010

Client Sample ID: 250404010-01
Date Collected: 04/03/25 20:00
Date Received: 04/04/25 12:30

Lab Sample ID: 180-188719-1
Matrix: Solid
Percent Solids: 33.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	350.1			0.23 g	10 mL	493518	04/09/25 08:18	BAB	EET PIT
Total/NA	Analysis	EPA 350.1		2			493577	04/09/25 13:20	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

BAB = Brooke Batyi

Batch Type: Analysis

BAB = Brooke Batyi

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-2
SDG: 250404010

Client Sample ID: 250404010-01
Date Collected: 04/03/25 20:00
Date Received: 04/04/25 12:30

Lab Sample ID: 180-188719-1
Matrix: Solid
Percent Solids: 33.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled (EPA 350.1)	890		52		mg/Kg	☼	04/09/25 08:18	04/09/25 13:20	2

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-2
SDG: 250404010

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-493518/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 493577 — **Prep Batch: 493518**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		9.1		mg/Kg		04/09/25 08:17	04/09/25 13:14	1

Lab Sample ID: LCS 180-493518/5-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 493577 — **Prep Batch: 493518**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	95.2	101		mg/Kg		106	90 - 110

Lab Sample ID: 180-187938-A-5-AM MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 493577 — **Prep Batch: 493518**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	310	FL	325	531	FL	mg/Kg	☼	69	90 - 110

Lab Sample ID: 180-187938-A-5-AN MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 493577 — **Prep Batch: 493518**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia, distilled	310	FL	341	651		mg/Kg	☼	101	90 - 110	20	20

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25

Job ID: 180-188719-2
SDG: 250404010

General Chemistry

Prep Batch: 493518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Total/NA	Solid	350.1	
MB 180-493518/4-A	Method Blank	Total/NA	Solid	350.1	
LCS 180-493518/5-A	Lab Control Sample	Total/NA	Solid	350.1	
180-187938-A-5-AM MS	Matrix Spike	Total/NA	Solid	350.1	
180-187938-A-5-AN MSD	Matrix Spike Duplicate	Total/NA	Solid	350.1	

Analysis Batch: 493577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188719-1	250404010-01	Total/NA	Solid	EPA 350.1	493518
MB 180-493518/4-A	Method Blank	Total/NA	Solid	EPA 350.1	493518
LCS 180-493518/5-A	Lab Control Sample	Total/NA	Solid	EPA 350.1	493518
180-187938-A-5-AM MS	Matrix Spike	Total/NA	Solid	EPA 350.1	493518
180-187938-A-5-AN MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 350.1	493518

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250404010**

Additional Information : **Monthly Limed Sludge 4/1/25, 4/2/25, 4/3/25**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn	NH3(*) (Savannah GA Lab)		
							Number of Containers					
250404010-01	4/3/25	2000	S	N	C	5 DAY TURN AROUND *Requesting to receive a Level IV Data Package for the Solid Monthly Ammonia Split Sample	1	1	1	1		
								J1	2.8			
									-0.4			
								#25	2.4			

180-188719 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	4-4-25	0935	[signature]	Eurofins Pgh	4-4-25	0935
[signature]	EPIINE	4-4-25	12:30	[signature]	EPIINE	4-4-25	1230
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results. PADEP Accredited test methods required.

COC Analyst Cooler Review: Initials: [illegible] Date: 4/4/25 Supervisor Review: Initials: [illegible] Date: 4-4-25

Page 1 of 1

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-188719-2
SDG Number: 250404010

Login Number: 188719
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250414010 **Sample Date:** 4/14/2025

Sample ID Number: 250414010-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	4/17/2025	See attached report	ug/Kg Dry	52		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	4/17/2025	32	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCBs and solids grab

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by: Larissa Hovel

4-24-25

Date

Printed Date

Thursday, April 24, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 4/21/2025 9:43:23 AM

JOB DESCRIPTION

Limed Sludge Monthly
250414010

JOB NUMBER

180-189177-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

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PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
4/21/2025 9:43:23 AM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 16

Job Narrative
180-189177-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 4/15/2025 3:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.1°C, 1.3°C, 1.5°C and 1.5°C.

PCBs
Method 8082A: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 250414010-01 (180-189177-1), (LCS 180-494025/2-A), (MB 180-494025/1-A), (180-189142-O-1-C), (180-189142-O-1-A MS) and (180-189142-O-1-B MSD).8215174

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 250414010-01 (180-189177-1), (LCS 180-494025/2-A), (MB 180-494025/1-A), (180-189142-O-1-C), (180-189142-O-1-A MS) and (180-189142-O-1-B MSD).6239381
4297680

Method 8082A: The continuing calibration verification (CCV) associated with 180-494044 recovered low and outside the control limits for surrogate DCB on one column. Results are confirmed on both columns and reported from the passing column. The associated samples are: (CCVIS 180-494044/47) and (CCVIS 180-494044/5).

Method 8082A: The continuing calibration verification (CCV) associated with 180-494044 recovered low and outside the control limits for surrogate TCMX on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCVIS 180-494044/27).

Method 8082A: The continuing calibration verification (CCV) associated with 180-494044 recovered low and outside the control limits for 1016 on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCVIS 180-494044/47).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-189177-1
SDG: 250414010

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
^c	CCV Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-189177-1
SDG: 250414010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-189177-1
SDG: 250414010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-189177-1	250414010-01	Solid	04/14/25 10:05	04/15/25 15:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-189177-1
SDG: 250414010

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-189177-1
SDG: 250414010

Client Sample ID: 250414010-01
Date Collected: 04/14/25 10:05
Date Received: 04/15/25 15:30

Lab Sample ID: 180-189177-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			494118	04/17/25 13:09	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250414010-01
Date Collected: 04/14/25 10:05
Date Received: 04/15/25 15:30

Lab Sample ID: 180-189177-1
Matrix: Solid
Percent Solids: 31.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	20.0 mL	494025	04/16/25 15:09	DVC	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	494044	04/17/25 18:38	JMO	EET PIT
	Instrument ID: CHGC20									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

DVC = Daniel Capodanno

Batch Type: Analysis

JMO = John Oravec

LWM = Leslie McIntire

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-189177-1
SDG: 250414010

Client Sample ID: 250414010-01
Date Collected: 04/14/25 10:05
Date Received: 04/15/25 15:30

Lab Sample ID: 180-189177-1
Matrix: Solid
Percent Solids: 31.7

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		52		ug/Kg	☼	04/16/25 15:09	04/17/25 18:38	1
PCB-1221	ND		52		ug/Kg	☼	04/16/25 15:09	04/17/25 18:38	1
PCB-1232	ND		52		ug/Kg	☼	04/16/25 15:09	04/17/25 18:38	1
PCB-1242	ND		52		ug/Kg	☼	04/16/25 15:09	04/17/25 18:38	1
PCB-1248	ND		52		ug/Kg	☼	04/16/25 15:09	04/17/25 18:38	1
PCB-1254	**250**		52		ug/Kg	☼	04/16/25 15:09	04/17/25 18:38	1
PCB-1260	ND		52		ug/Kg	☼	04/16/25 15:09	04/17/25 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*63*	*^c*	*60 - 119*	*04/16/25 15:09*	*04/17/25 18:38*	*1*
Tetrachloro-m-xylene (Surr)	*75*		*60 - 119*	*04/16/25 15:09*	*04/17/25 18:38*	*1*
DCB Decachlorobiphenyl (Surr)	*73*	*^c *3*	*57 - 125*	*04/16/25 15:09*	*04/17/25 18:38*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*57 - 125*	*04/16/25 15:09*	*04/17/25 18:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**32**		0.50		%			04/17/25 13:09	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-189177-1
SDG: 250414010

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-494025/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494044 — **Prep Batch: 494025**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		04/16/25 14:50	04/17/25 17:27	1
PCB-1221	ND		17		ug/Kg		04/16/25 14:50	04/17/25 17:27	1
PCB-1232	ND		17		ug/Kg		04/16/25 14:50	04/17/25 17:27	1
PCB-1242	ND		17		ug/Kg		04/16/25 14:50	04/17/25 17:27	1
PCB-1248	ND		17		ug/Kg		04/16/25 14:50	04/17/25 17:27	1
PCB-1254	ND		17		ug/Kg		04/16/25 14:50	04/17/25 17:27	1
PCB-1260	ND		17		ug/Kg		04/16/25 14:50	04/17/25 17:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*81*		*60 - 119*	*04/16/25 14:50*	*04/17/25 17:27*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*60 - 119*	*04/16/25 14:50*	*04/17/25 17:27*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*57 - 125*	*04/16/25 14:50*	*04/17/25 17:27*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*57 - 125*	*04/16/25 14:50*	*04/17/25 17:27*	*1*

Lab Sample ID: LCS 180-494025/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494044 — **Prep Batch: 494025**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	859		ug/Kg		64	53 - 115
PCB-1260	1330	1240	*3	ug/Kg		93	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*72*		*60 - 119*
Tetrachloro-m-xylene (Surr)	*69*		*60 - 119*
DCB Decachlorobiphenyl (Surr)	*71*	**3*	*57 - 125*
DCB Decachlorobiphenyl (Surr)	*78*		*57 - 125*

Lab Sample ID: 180-189142-O-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494044 — **Prep Batch: 494025**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND	F2	1330	1270		ug/Kg		98	53 - 115
PCB-1260	ND		1330	992		ug/Kg		74	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*58*	*S1- p*	*60 - 119*
Tetrachloro-m-xylene (Surr)	*127*	*S1+*	*60 - 119*
DCB Decachlorobiphenyl (Surr)	*106*	**3*	*57 - 125*
DCB Decachlorobiphenyl (Surr)	*65*	*p*	*57 - 125*

Lab Sample ID: 180-189142-O-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494044 — **Prep Batch: 494025**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND	F2	1320	950	F2	ug/Kg		72	53 - 115	29	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-189142-O-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494044 — **Prep Batch: 494025**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		1320	868		ug/Kg		66	45 - 108	13	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*57*	*S1- p*	*60 - 119*
Tetrachloro-m-xylene (Surr)	*126*	*S1+*	*60 - 119*
DCB Decachlorobiphenyl (Surr)	*75*	**3*	*57 - 125*
DCB Decachlorobiphenyl (Surr)	*62*		*57 - 125*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-189177-1 DU — **Client Sample ID: 250414010-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494118

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	32		31.1		%		2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-189177-1
SDG: 250414010

GC Semi VOA

Prep Batch: 494025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189177-1	250414010-01	Total/NA	Solid	3541	
MB 180-494025/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-494025/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-189142-O-1-A MS	Matrix Spike	Total/NA	Solid	3541	
180-189142-O-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 494044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189177-1	250414010-01	Total/NA	Solid	EPA 8082A	494025
MB 180-494025/1-A	Method Blank	Total/NA	Solid	EPA 8082A	494025
LCS 180-494025/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	494025
180-189142-O-1-A MS	Matrix Spike	Total/NA	Solid	EPA 8082A	494025
180-189142-O-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	494025

General Chemistry

Analysis Batch: 494118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189177-1	250414010-01	Total/NA	Solid	SM 2540G	
180-189177-1 DU	250414010-01	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250414010**

Additional Information : Limed Sludge Monthly

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: Total Solids, PCB					
250414010-01	4/14/25	1005	S	N	G	** 5 day rush**	1					

Number of Containers

180-189177 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
DW	ALCOSAN	4-15-25	1452		Eurofins Pgh	4-15-25	1452
	EPITNE	4-15-25	1600				

COC Analyst Cooler Review: Initials: TN Date: 4/15/25

Supervisor Review: Initials: SJ Date: 4 14 25

Alcosan #25 -0.4

J4 1.7 → 1.3

J5 1.5 → 1.1

J6 1.9 → 1.5

J7 1.9 → 1.5

180-189177 Waybill

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-189177-1
SDG Number: 250414010

Login Number: 189177
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250506012 **Sample Date:** 5/5/2025

Sample ID Number: 250506012-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	Contract Lab	EurofinsPittsburgh	5/14/2025	840	mg/Dry Kg	24		
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	5/16/2025	18000	mg/Dry Kg	6800	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	5/13/2025	2.0	mg/kg dry	1.3		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	5/12/2025	6.5	mg/kg dry	2.6		
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	5/13/2025	2.4	mg/kg dry	1.3		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	5/12/2025	38	%	0.50		
Metals								
Arsenic	Contract Lab	EurofinsLancaster	5/22/2025	4.6	mg/kg dry	0.93		
Cadmium	Contract Lab	EurofinsLancaster	5/22/2025	0.63	mg/kg dry	0.23		
Chromium	Contract Lab	EurofinsLancaster	5/22/2025	24	mg/kg dry	0.93		
Copper	Contract Lab	EurofinsLancaster	5/22/2025	150	mg/kg dry	0.93		

Printed Date
Wednesday, May 28, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250506012 **Sample Date:** 5/5/2025

Sample ID Number: 250506012-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Lead	Contract Lab	EurofinsLancaster	5/23/2025	54	mg/kg dry	0.46		
Mercury, Total	EPA 7471B	jweaver	5/14/2025	0.35	mg/Dry Kg	0.17		
Molybdenum	Contract Lab	EurofinsLancaster	5/22/2025	4.9	mg/kg dry	0.46		
Nickel	Contract Lab	EurofinsLancaster	5/22/2025	17	mg/kg dry	0.93		
Phosphorus, Total	~~EPA6010C~~ Contract Lab LRH 5-28-25	RJLeeGroup	5/13/2025	4360	mg/kg	48.9		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	5/22/2025	1600	mg/kg dry	93		
Selenium	Contract Lab	EurofinsLancaster	5/22/2025	2.2	mg/Dry Kg	0.93		
Zinc	Contract Lab	EurofinsLancaster	5/22/2025	320	mg/kg dry	70		

Printed Date
Wednesday, May 28, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250506012 **Sample Date:** 5/5/2025

Sample ID Number: 250506012-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

5/1/25, 5/4/25, 5/5/25 Comp.

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hood

5-28-25

Date

Printed Date
Wednesday, May 28, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250506012 **Sample Date:** 5/5/2025

Sample ID Number: 250506012-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	tbradley2	5/13/2025	2161.13	mg/Dry Kg	930	H	MS passed. MSD recovered high. RPD passed. Result possible biased high.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	tbradley2	5/13/2025	760.72	mg/Wet Kg	327	H	MS passed. MSD recovered high. RPD passed. Result possible biased high.
Daily 1								
Percent Fixed Solids	SM 2540G - 2015	lfalck	5/6/2025	45.04	%			
Percent Total Solids	SM 2540G - 2015	lfalck	5/6/2025	35.2	%			
Percent Volatile Solids	SM 2540G - 2015	lfalck	5/6/2025	54.96	%			

Printed Date
Wednesday, May 28, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250506012 **Sample Date:** 5/5/2025

Sample ID Number: 250506012-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
H	Possible high bias

Comments:

5/1/25, 5/4/25, 5/5/25 Comp.

Released by:

Alissa Hoard

5-28-25

Date

Printed Date
Wednesday, May 28, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 5/16/2025 3:38:44 PM

JOB DESCRIPTION

Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25
250506012

JOB NUMBER

180-190256-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
5/16/2025 3:38:44 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 12
Chain of Custody 13
Receipt Checklists 15

Job ID: 180-190256-2
Eurofins Pittsburgh

Job Narrative
180-190256-2

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 5/9/2025 1:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5°C and 2.1°C.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-2
SDG: 250506012

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-2
SDG: 250506012

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-2
SDG: 250506012

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-190256-1	250506012-01	Solid	05/05/25 17:00	05/09/25 13:50

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-2
SDG: 250506012

Method	Method Description	Protocol	Laboratory
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
350.1	Distillation, Ammonia	EPA	EET PIT

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-2
SDG: 250506012

Client Sample ID: 250506012-01
Date Collected: 05/05/25 17:00
Date Received: 05/09/25 13:50

Lab Sample ID: 180-190256-1
Matrix: Solid
Percent Solids: 37.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	350.1			0.22 g	10 mL	495759	05/13/25 11:46	RSK	EET PIT
Total/NA	Analysis	EPA 350.1		1			495903	05/14/25 18:35	SNR	EET PIT
	Instrument ID:	BLUE-ASTORIA								

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

RSK = Robert Kurtz

Batch Type: Analysis

SNR = Sabra Richart

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-2
SDG: 250506012

Client Sample ID: 250506012-01
Date Collected: 05/05/25 17:00
Date Received: 05/09/25 13:50

Lab Sample ID: 180-190256-1
Matrix: Solid
Percent Solids: 37.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled (EPA 350.1)	840		24		mg/Kg	☼	05/13/25 11:46	05/14/25 18:35	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-2
SDG: 250506012

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-495759/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495903 — **Prep Batch: 495759**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		9.1		mg/Kg		05/13/25 11:46	05/14/25 18:23	1

Lab Sample ID: LCS 180-495759/5-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495903 — **Prep Batch: 495759**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	95.2	89.0		mg/Kg		93	90 - 110

Lab Sample ID: 200-77948-D-9-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495903 — **Prep Batch: 495759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	230	F2 FL	207	354	FL	mg/Kg	☼	58	90 - 110

Lab Sample ID: 200-77948-D-9-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495903 — **Prep Batch: 495759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia, distilled	230	F2 FL	198	285	F2 FL	mg/Kg	☼	26	90 - 110	22	20

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-2
SDG: 250506012

General Chemistry

Prep Batch: 495759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Total/NA	Solid	350.1	
MB 180-495759/4-A	Method Blank	Total/NA	Solid	350.1	
LCS 180-495759/5-A	Lab Control Sample	Total/NA	Solid	350.1	
200-77948-D-9-B MS	Matrix Spike	Total/NA	Solid	350.1	
200-77948-D-9-C MSD	Matrix Spike Duplicate	Total/NA	Solid	350.1	

Analysis Batch: 495903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Total/NA	Solid	EPA 350.1	495759
MB 180-495759/4-A	Method Blank	Total/NA	Solid	EPA 350.1	495759
LCS 180-495759/5-A	Lab Control Sample	Total/NA	Solid	EPA 350.1	495759
200-77948-D-9-B MS	Matrix Spike	Total/NA	Solid	EPA 350.1	495759
200-77948-D-9-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 350.1	495759

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250506012**

Additional Information : **Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn	NH3(*) (Savannah GA Lab)		
							Number of Containers					
250506012-01	5/5/25	1700	S	N	C	5 DAY TURN AROUND *Requesting to receive a Level IV Data Package for the Solid Monthly Ammonia Split Sample	1	1	1	1		

180-190256 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	ALCOSAN	5-9-25	1128	[illegible]	Eurofins Pgh	5/9/25	1128
[illegible]	ERTAE	5/9/25	1350	[illegible]	[illegible]	5/9/25	1350
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results. PADEP Accredited test methods required.

COC Analyst Cooler Review: Initials: [illegible] Date: 5-9-25 Supervisor Review: Initials: [illegible] Date: 5-6-25

Page 1 of 1

AR #25

CF-0.4

L12	1.9	1.5
L13	2.5	2.1

180-190256 Waybill

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-190256-2
SDG Number: 250506012

Login Number: 190256
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on Ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 5/23/2025 2:58:19 AM

JOB DESCRIPTION

Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25
250506012

JOB NUMBER

180-190256-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
5/23/2025 2:58:19 AM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 16
Chain of Custody 18
Receipt Checklists 21

Job Narrative
180-190258-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 5/9/2025 1:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5°C and 2.1°C.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: The following sample was diluted due to the nature of the sample matrix: (ICV 180-495738/18). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
FL	MS and/or MSD recovery below control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommanded "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-190256-1	250506012-01	Solid	05/05/25 17:00	05/09/25 13:50

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15236, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

Client Sample ID: 250506012-01 — **Lab Sample ID: 180-190256-1**
Date Collected: 05/05/25 17:00 — **Matrix: Solid**
Date Received: 05/09/25 13:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			495661	05/12/25 11:27	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250506012-01 — **Lab Sample ID: 180-190256-1**
Date Collected: 05/05/25 17:00 — **Matrix: Solid**
Date Received: 05/09/25 13:50 — **Percent Solids: 37.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			10.0243 g	100 mL	495771	05/13/25 13:33	ERP	EET PIT
Soluble	Analysis	EPA 9056A		1			495738	05/13/25 23:55	ERP	EET PIT
	Instrument ID: INUVION									
Total/NA	Prep	3050B			1.14 g	100 mL	646532	05/22/25 06:07	UJL8	ELLE
Total/NA	Analysis	6020B		2			647956	05/22/25 20:14	LHF4	ELLE
	Instrument ID: E07 - 27813									
Total/NA	Prep	3050B			1.14 g	100 mL	648532	05/22/25 06:07	UJL8	ELLE
Total/NA	Analysis	6020B		2			648008	05/23/25 00:34	LHF4	ELLE
	Instrument ID: E08 - 30647									
Total/NA	Prep	351.2			0.31 g	25 mL	644498	05/15/25 10:17	TC7D	ELLE
Total/NA	Analysis	351.2		20			645231	05/16/25 15:07	JCG7	ELLE
	Instrument ID: 25924									
Soluble	Leach	DI Leach			10.00 g	100.0 mL	495629	05/12/25 07:29	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			495671	05/12/25 12:26	RSK	EET PIT
	Instrument ID: SHAMU									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - ERP = Evan Papak
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Prep
  - TC7D = Lillian Sharpe
  - UJL8 = James Mertz
- Batch Type: Analysis
  - JCG7 = Elena Hess
  - LHF4 = Diamond Boyer

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

Client Sample ID: 250506012-01
Date Collected: 05/05/25 17:00
Date Received: 05/09/25 13:50

Lab Sample ID: 180-190256-1
Matrix: Solid
Percent Solids: 37.8

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	2.4		1.3		mg/Kg	☼		05/13/25 23:55	1
Nitrate as N	2.0		1.3		mg/Kg	☼		05/13/25 23:55	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.6		0.93		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Cadmium	0.63		0.23		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Calcium	32000		93		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Chromium	24		0.93		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Copper	150		0.93		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Lead	54		0.46		mg/Kg	☼	05/22/25 06:07	05/23/25 00:34	2
Molybdenum	4.9		0.46		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Nickel	17		0.93		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Potassium	1600		93		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Selenium	2.2		0.93		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2
Zinc	320		70		mg/Kg	☼	05/22/25 06:07	05/22/25 20:14	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	18000	4	6800		mg/Kg	☼	05/15/25 10:17	05/16/25 15:07	20
Total Solids (SM 2540G)	38		0.50		%			05/12/25 11:27	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	6.5		2.6		mg/Kg	☼		05/12/25 12:26	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-495771/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 495738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			05/13/25 20:20	1
Nitrate as N	ND		0.50		mg/Kg			05/13/25 20:20	1

Lab Sample ID: LCS 180-495771/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 495738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	13.5		mg/Kg		108	80 - 120
Nitrate as N	12.5	12.6		mg/Kg		101	80 - 120

Lab Sample ID: 180-190223-I-1-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 495738

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		16.3	15.0		mg/Kg	☼	92	80 - 120
Nitrate as N	ND		16.3	14.3		mg/Kg	☼	88	80 - 120

Lab Sample ID: 180-190223-I-1-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 495738

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		16.2	15.0		mg/Kg	☼	92	80 - 120	0	15
Nitrate as N	ND		16.2	14.3		mg/Kg	☼	88	80 - 120	0	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-646532/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 647956 — **Prep Batch: 646532**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Cadmium	ND		0.10		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Calcium	ND		40		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Chromium	ND		0.40		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Copper	ND		0.40		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Lead	ND		0.20		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Molybdenum	ND		0.20		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Nickel	ND		0.40		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Potassium	ND		40		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Selenium	ND		0.40		mg/Kg		05/22/25 06:07	05/22/25 17:15	2
Zinc	ND		30		mg/Kg		05/22/25 06:07	05/22/25 17:15	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-646532/2-A ^2
Matrix: Solid
Analysis Batch: 647956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 646532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	49.9		mg/Kg		100	87 - 114
Cadmium	5.00	5.23		mg/Kg		105	88 - 117
Calcium	500	518		mg/Kg		104	84 - 119
Chromium	50.0	50.8		mg/Kg		102	86 - 116
Copper	50.0	51.1		mg/Kg		102	84 - 115
Lead	5.00	5.19		mg/Kg		104	88 - 117
Molybdenum	5.00	5.31		mg/Kg		106	86 - 119
Nickel	50.0	50.9		mg/Kg		102	87 - 115
Potassium	500	492		mg/Kg		98	83 - 118
Selenium	10.0	10.0		mg/Kg		100	87 - 115
Zinc	50.0	50.5		mg/Kg		101	86 - 116

Lab Sample ID: 410-221606-D-1-B MS ^2
Matrix: Solid
Analysis Batch: 647956

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 646532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	11		42.6	54.8		mg/Kg	☼	103	75 - 125
Cadmium	0.099		4.26	4.56		mg/Kg	☼	105	75 - 125
Calcium	39000	E 4 F2	426	26900	4	mg/Kg	☼	-2726	75 - 125
Chromium	22		42.6	73.2		mg/Kg	☼	119	75 - 125
Copper	28		42.6	74.2		mg/Kg	☼	109	75 - 125
Lead	7.5		4.26	12.0		mg/Kg	☼	106	75 - 125
Molybdenum	0.64		4.26	5.28		mg/Kg	☼	109	75 - 125
Nickel	26		42.6	71.4		mg/Kg	☼	106	75 - 125
Potassium	4900	4	426	7830	4	mg/Kg	☼	692	75 - 125
Selenium	ND		8.53	8.94		mg/Kg	☼	105	75 - 125
Zinc	58		42.6	105		mg/Kg	☼	110	75 - 125

Lab Sample ID: 410-221606-D-1-B MS ^2
Matrix: Solid
Analysis Batch: 648008

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 646532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	9.7		42.6	48.9		mg/Kg	☼	92	75 - 125
Cadmium	ND		4.26	3.99		mg/Kg	☼	92	75 - 125
Calcium	29000	4 F2	426	18800	4	mg/Kg	☼	-2383	75 - 125
Chromium	17		42.6	50.9		mg/Kg	☼	80	75 - 125
Copper	25		42.6	65.3		mg/Kg	☼	94	75 - 125
Lead	6.4		4.26	9.95		mg/Kg	☼	84	75 - 125
Nickel	20	FL	42.6	49.4	FL	mg/Kg	☼	70	75 - 125
Potassium	3900	4	426	5810	4	mg/Kg	☼	458	75 - 125
Selenium	ND		8.53	8.05		mg/Kg	☼	94	75 - 125
Zinc	54		42.6	93.8		mg/Kg	☼	94	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-221606-D-1-C MSD ^2
Matrix: Solid
Analysis Batch: 647956

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 646532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	11		45.5	56.0		mg/Kg	☼	100	75 - 125	2	20
Cadmium	0.099		4.55	5.06		mg/Kg	☼	109	75 - 125	11	20
Chromium	22		45.5	75.7		mg/Kg	☼	117	75 - 125	3	20
Copper	28		45.5	74.6		mg/Kg	☼	103	75 - 125	1	20
Lead	7.5		4.55	12.1		mg/Kg	☼	103	75 - 125	1	20
Molybdenum	0.64		4.55	5.67		mg/Kg	☼	111	75 - 125	7	20
Nickel	26		45.5	73.1		mg/Kg	☼	103	75 - 125	2	20
Potassium	4900	4	455	8150	4	mg/Kg	☼	718	75 - 125	4	20
Selenium	ND		9.10	9.75		mg/Kg	☼	107	75 - 125	9	20
Zinc	58		45.5	113		mg/Kg	☼	120	75 - 125	7	20

Lab Sample ID: 410-221606-D-1-C MSD ^2
Matrix: Solid
Analysis Batch: 648008

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 646532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	9.7		45.5	51.4		mg/Kg	☼	91	75 - 125	5	20
Cadmium	ND		4.55	4.39		mg/Kg	☼	95	75 - 125	10	20
Calcium	29000	4 F2	455	25400	4 F2	mg/Kg	☼	-781	75 - 125	30	20
Chromium	17		45.5	56.1		mg/Kg	☼	87	75 - 125	10	20
Copper	25		45.5	67.6		mg/Kg	☼	93	75 - 125	3	20
Lead	6.4		4.55	10.3		mg/Kg	☼	85	75 - 125	3	20
Nickel	20	FL	45.5	53.3	FL	mg/Kg	☼	74	75 - 125	8	20
Potassium	3900	4	455	6340	4	mg/Kg	☼	546	75 - 125	9	20
Selenium	ND		9.10	8.80		mg/Kg	☼	97	75 - 125	9	20
Zinc	54		45.5	104		mg/Kg	☼	111	75 - 125	11	20

Lab Sample ID: 410-221606-B-1-D DU ^2
Matrix: Solid
Analysis Batch: 647956

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 646532

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	11		9.29		mg/Kg	☼	14	20
Cadmium	0.099		ND		mg/Kg	☼	NC	20
Calcium	39000	E 4 F2	33300		mg/Kg	☼	14	20
Chromium	22		19.0		mg/Kg	☼	16	20
Copper	28		26.1		mg/Kg	☼	7	20
Lead	7.5		6.38		mg/Kg	☼	16	20
Molybdenum	0.64		0.465	F5	mg/Kg	☼	32	20
Nickel	26		22.5		mg/Kg	☼	15	20
Potassium	4900	4	3690	F3	mg/Kg	☼	28	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Zinc	58		50.4		mg/Kg	☼	14	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-221606-B-1-D DU ^2 — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 648008 — **Prep Batch: 646532**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	9.7		8.96		mg/Kg	☼	8	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Calcium	29000	4 F2	27400		mg/Kg	☼	6	20
Chromium	17		15.2		mg/Kg	☼	9	20
Copper	25		25.0		mg/Kg	☼	0.4	20
Lead	6.4		5.86		mg/Kg	☼	9	20
Nickel	20	FL	18.1		mg/Kg	☼	7	20
Potassium	3900	4	3060	F3	mg/Kg	☼	23	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Zinc	54		50.2		mg/Kg	☼	7	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-644498/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 645187 — **Prep Batch: 644498**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		05/15/25 10:17	05/16/25 12:36	1

Lab Sample ID: LCS 410-644498/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 645231 — **Prep Batch: 644498**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	496	531		mg/Kg		107	70 - 130

Lab Sample ID: 180-190256-1 MS — **Client Sample ID: 250506012-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 645231 — **Prep Batch: 644498**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	18000	4	855	40400	4	mg/Kg	☼	2664	70 - 130

Lab Sample ID: 180-190256-1 DU — **Client Sample ID: 250506012-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 645231 — **Prep Batch: 644498**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	18000	4	11700	F5	mg/Kg	☼	40	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-495629/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 495671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			05/12/25 12:10	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 180-495629/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 495671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	21.9		mg/Kg		109	90 - 110

Lab Sample ID: 180-190223-M-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 495671

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	ND	FL	26.0	22.9	FL	mg/Kg	☼	88	90 - 110

Lab Sample ID: 180-190223-M-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 495671

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	FL	26.1	21.9	FL	mg/Kg	☼	84	90 - 110	4	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-190116-A-11 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495661

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	32		30.0		%		6	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

HPLC/IC

Analysis Batch: 495738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Soluble	Solid	EPA 9056A	495771
MB 180-495771/1-A	Method Blank	Soluble	Solid	EPA 9056A	495771
LCS 180-495771/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	495771
180-190223-I-1-H MS	Matrix Spike	Soluble	Solid	EPA 9056A	495771
180-190223-I-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	495771

Leach Batch: 495771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Soluble	Solid	DI Leach	
MB 180-495771/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-495771/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-190223-I-1-H MS	Matrix Spike	Soluble	Solid	DI Leach	
180-190223-I-1-I MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Metals

Prep Batch: 646532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Total/NA	Solid	3050B	
MB 410-646532/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-646532/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
410-221606-D-1-B MS ^2	Matrix Spike	Total/NA	Solid	3050B	
410-221606-D-1-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-221606-B-1-D DU ^2	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 647956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Total/NA	Solid	6020B	646532
MB 410-646532/1-A ^2	Method Blank	Total/NA	Solid	6020B	646532
LCS 410-646532/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	646532
410-221606-D-1-B MS ^2	Matrix Spike	Total/NA	Solid	6020B	646532
410-221606-D-1-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	6020B	646532
410-221606-B-1-D DU ^2	Duplicate	Total/NA	Solid	6020B	646532

Analysis Batch: 648008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Total/NA	Solid	6020B	646532
410-221606-D-1-B MS ^2	Matrix Spike	Total/NA	Solid	6020B	646532
410-221606-D-1-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	6020B	646532
410-221606-B-1-D DU ^2	Duplicate	Total/NA	Solid	6020B	648532

General Chemistry

Leach Batch: 495629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Soluble	Solid	DI Leach	
MB 180-495629/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-495629/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-190223-M-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
180-190223-M-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25

Job ID: 180-190256-1
SDG: 250506012

General Chemistry

Analysis Batch: 495661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Total/NA	Solid	SM 2540G	
180-190116-A-11 DU	Duplicate	Total/NA	Solid	SM 2540G	

Analysis Batch: 495671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Soluble	Solid	EPA 353.2	495629
MB 180-495629/1-A	Method Blank	Soluble	Solid	EPA 353.2	495629
LCS 180-495629/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	495629
180-190223-M-1-E MS	Matrix Spike	Soluble	Solid	EPA 353.2	495629
180-190223-M-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 353.2	495629

Prep Batch: 644498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Total/NA	Solid	351.2	
MB 410-644498/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-644498/1-A	Lab Control Sample	Total/NA	Solid	351.2	
180-190256-1 MS	250506012-01	Total/NA	Solid	351.2	
180-190256-1 DU	250506012-01	Total/NA	Solid	351.2	

Analysis Batch: 645187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-644498/2-A	Method Blank	Total/NA	Solid	351.2	644498

Analysis Batch: 645231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190256-1	250506012-01	Total/NA	Solid	351.2	644498
LCS 410-644498/1-A	Lab Control Sample	Total/NA	Solid	351.2	644498
180-190256-1 MS	250606012-01	Total/NA	Solid	351.2	644498
180-190256-1 DU	250506012-01	Total/NA	Solid	351.2	644498

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250506012**

Additional Information : **Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn	NH3(*) (Savannah GA Lab)		
							Number of Containers					
250506012-01	5/5/25	1700	S	N	C	5 DAY TURN AROUND *Requesting to receive a Level IV Data Package for the Solid Monthly Ammonia Split Sample	1	1	1	1		

180-190256 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	ALCOSAN	5-9-25	1128	[illegible]	Eurofins Pgh	5/9/25	1128
[illegible]	EBTAS	5/9/25	1350	[illegible]	[illegible]	5/9/25	1350
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results. PADEP Accredited test methods required.

COC Analyst Cooler Review: Initials: [illegible] Date: 5-9-25 Supervisor Review: Initials: [illegible] Date: 5-6 25

Page 1 of 1

SR #25

CF-0.4

L12	1.9	1.5
L13	2.5	2.1

180-190256 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-538392.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-190256-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 5/22/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Monthly Limed Sludge 5/1/25, 5/4/25, 5/5/25	Project #: 16007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_Prep Nitrogen, Total Kjeldahl	6020B/3050B (MOD) PPL Metals by ICP/MS 6020B										Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X												X	
250506012-01 (180-190256-1)	5/5/25	17:00 Eastern	G	Solid			X	X										1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 5/12/25 1330	Company: ET	Received by:	Date/Time: 5/12/25 1505	Company: Elle	
Relinquished by:	Date/Time: 5/12/25 1930	Company: Elle	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/12/25 1930	Company: ET	
Custody Seals Intact: ✓ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 4.2 C 4.1			

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-190256-1
SDG Number: 250506012

Login Number: 190256
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-190256-1
SDG Number: 250506012

Login Number: 190256
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 05/12/25 08:05 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA090520250025
Samples Received: May 9, 2025
Report Date: May 16, 2025
Client Project: 250506012
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250506012-01	PA090520250025-001	05/05/2025, 05:00 PM	Phosphorus	0.436	4360	0.00489	48.9	05/13/2025	P

Comments:

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00399, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)
A: AIHA LAP, LLC Accredited (Lab ID 100394)
— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part of any of the above scopes of accreditations

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples. This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250519010 **Sample Date:** 5/18/2025

Sample ID Number: 250519010-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	5/23/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	5/22/2025	33	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCB AND SOLIDS GRAB

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

Larissa Hawk

5-28-25

Date

Printed Date

Wednesday, May 28, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 5/27/2025 10:23:29 PM

JOB DESCRIPTION

Limed Sludge Monthly
250519010

JOB NUMBER

180-190756-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
5/27/2025 10:23:29 PM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 15

Job Narrative
180-190756-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 5/21/2025 12:55 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.6°C.

PCBs
Method 8082A: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 250519010-01 (180-190756-1), (LCS 180-496400/2-A), (MB 180-496400/1-A), (180-190696-A-1-N), (180-190696-A-1-L MS) and (180-190696-A-1-M MSD).6215174

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 250519010-01 (180-190756-1), (LCS 180-496400/2-A), (MB 180-496400/1-A), (180-190696-A-1-N), (180-190696-A-1-L MS) and (180-190696-A-1-M MSD).6239381
4297660

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-190756-1
SDG: 250519010

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-190756-1
SDG: 250519010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-28

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-190756-1
SDG: 250519010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-190756-1	250519010-01	Solid	05/18/25 10:26	05/21/25 12:55

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-190756-1
SDG: 250519010

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-190756-1
SDG: 250519010

Client Sample ID: 250519010-01
Date Collected: 05/18/25 10:26
Date Received: 05/21/25 12:55

Lab Sample ID: 180-190756-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			496445	05/22/25 13:04	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250519010-01
Date Collected: 05/18/25 10:26
Date Received: 05/21/25 12:55

Lab Sample ID: 180-190756-1
Matrix: Solid
Percent Solids: 32.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	20.0 mL	496400	05/22/25 06:03	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	496487	05/23/25 16:11	JMO	EET PIT
	Instrument ID: CHGC20									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

MKK = Mary Kenny

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-190756-1
SDG: 250519010

Client Sample ID: 250519010-01
Date Collected: 05/18/25 10:26
Date Received: 05/21/25 12:55

Lab Sample ID: 180-190756-1
Matrix: Solid
Percent Solids: 32.9

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg	☼	05/22/25 06:03	05/23/25 16:11	1
PCB-1221	ND		50		ug/Kg	☼	05/22/25 06:03	05/23/25 16:11	1
PCB-1232	ND		50		ug/Kg	☼	05/22/25 06:03	05/23/25 16:11	1
PCB-1242	ND		50		ug/Kg	☼	05/22/25 06:03	05/23/25 16:11	1
PCB-1248	ND		50		ug/Kg	☼	05/22/25 06:03	05/23/25 16:11	1
PCB-1254	ND		50		ug/Kg	☼	05/22/25 06:03	05/23/25 16:11	1
PCB-1260	ND		50		ug/Kg	☼	05/22/25 06:03	05/23/25 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*84*		*17 - 144*	*05/22/25 06:03*	*05/23/25 16:11*	*1*
Tetrachloro-m-xylene (Surr)	*86*		*17 - 144*	*05/22/25 06:03*	*05/23/25 18:11*	*1*
DCB Decachlorobiphenyl (Surr)	*90*		*26 - 142*	*05/22/25 06:03*	*05/23/25 16:11*	*1*
DCB Decechlorobiphenyl (Surr)	*84*		*26 - 142*	*05/22/25 06:03*	*05/23/25 18:11*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**33**		0.50		%			05/22/25 13:04	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-190756-1
SDG: 250519010

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-496400/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 496487 — **Prep Batch: 496400**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		05/22/25 06:03	05/23/25 09:44	1
PCB-1221	ND		17		ug/Kg		05/22/25 06:03	05/23/25 09:44	1
PCB-1232	ND		17		ug/Kg		05/22/25 06:03	05/23/25 09:44	1
PCB-1242	ND		17		ug/Kg		05/22/25 06:03	05/23/25 09:44	1
PCB-1248	ND		17		ug/Kg		05/22/25 06:03	05/23/25 09:44	1
PCB-1254	ND		17		ug/Kg		05/22/25 06:03	05/23/25 09:44	1
PCB-1260	ND		17		ug/Kg		05/22/25 06:03	05/23/25 09:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*110*		*17 - 144*	*05/22/25 06:03*	*05/23/25 09:44*	*1*
Tetrachloro-m-xylene (Surr)	*106*		*17 - 144*	*05/22/25 06:03*	*05/23/25 09:44*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*26 - 142*	*05/22/25 06:03*	*05/23/25 09:44*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*26 - 142*	*05/22/25 06:03*	*05/23/25 09:44*	*1*

Lab Sample ID: LCS 180-496400/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 496487 — **Prep Batch: 496400**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1210		ug/Kg		91	53 - 115
PCB-1260	1330	1010		ug/Kg		76	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*105*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*103*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*95*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*95*		*26 - 142*

Lab Sample ID: 180-190696-A-1-L MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 496487 — **Prep Batch: 496400**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		1440	1360		ug/Kg	☼	95	53 - 115
PCB-1260	ND		1440	1100		ug/Kg	☼	77	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*111*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*110*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*96*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*98*		*26 - 142*

Lab Sample ID: 180-190696-A-1-M MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 496487 — **Prep Batch: 496400**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1410	1220		ug/Kg	☼	87	53 - 115	11	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-190696-A-1-M MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 496487 — **Prep Batch: 496400**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		1410	979		ug/Kg	☼	70	45 - 108	12	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*100*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*97*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*84*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*90*		*26 - 142*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-190696-A-12 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 496445

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	91		93.4		%		3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-190756-1
SDG: 250519010

GC Semi VOA

Prep Batch: 496400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190756-1	250519010-01	Total/NA	Solid	3541	
MB 180-496400/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-496400/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-190696-A-1-L MS	Matrix Spike	Total/NA	Solid	3541	
180-190696-A-1-M MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 496487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190756-1	250519010-01	Total/NA	Solid	EPA 8082A	496400
MB 180-496400/1-A	Method Blank	Total/NA	Solid	EPA 8082A	496400
LCS 180-496400/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	496400
180-190696-A-1-L MS	Matrix Spike	Total/NA	Solid	EPA 8082A	496400
180-190696-A-1-M MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	496400

General Chemistry

Analysis Batch: 496445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-190756-1	250519010-01	Total/NA	Solid	SM 2540G	
180-190696-A-12 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250519010**

Additional Information : Limed Sludge Monthly

Tests to be Performed: Total Solids, PCB

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers
250519010-01	5/18/25	1026	S	N	G	** 5 day rush**	1
						L5 #20 -0.8cf	
						1.4 - 0.8 = 0.6°C	

180-190756 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	5-21-25	1110	[signature]	Eurofins Pgh	5-21-25	1110
[signature]	EPITHNE	5/21/25	1255	[signature]	EPITHNE	5-21-25	1255

COC Analyst Cooler Review: Initials: [initials] Date: 5-21-25

Supervisor Review: Initials: [initials] Date: 5-19-25

Page 1 of 1

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-190756-1
SDG Number: 250519010

Login Number: 190756
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with Immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250604011 **Sample Date:** 6/3/2025

Sample ID Number: 250604011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	tbradley2	6/11/2025	2239.46	mg/Dry Kg	167	S	MS recovered low the MSD recovered High. RPD passed. The spikes demonstrated matrix effects.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	tbradley2	6/11/2025	772.62	mg/Wet Kg	57.7	S	MS recovered low the MSD recovered High. RPD passed. The spikes demonstrated matrix effects.
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	6/18/2025	34000	mg/Dry Kg	9200		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	6/11/2025	4.7	mg/kg dry	1.4		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	6/12/2025	8.5	mg/kg dry	2.8		
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	6/11/2025	5.4	mg/kg dry	1.4		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	6/9/2025	36	%	0.50		
Metals								
Arsenic	Contract Lab	EurofinsLancaster	6/17/2025	7.3	mg/kg dry	0.97		
Cadmium	Contract Lab	EurofinsLancaster	6/17/2025	0.81	mg/kg dry	0.24		
Calcium	Contact Lab	EurofinsLancaster	6/17/2025	60000	mg/kg dry	97		

Printed Date
Wednesday, July 2, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250604011 **Sample Date:** 6/3/2025

Sample ID Number: 250604011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chromium	Contract Lab	EurofinsLancaster	6/17/2025	39	mg/kg dry	0.97		
Copper	Contract Lab	EurofinsLancaster	6/17/2025	230	mg/kg dry	0.97		
Lead	Contract Lab	EurofinsLancaster	6/17/2025	47	mg/kg dry	0.49		
Mercury, Total	EPA 7471B	jweaver	6/9/2025	0.31	mg/Dry Kg	0.17		
Molybdenum	Contract Lab	EurofinsLancaster	6/17/2025	4.5	mg/kg dry	0.49	^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
Nickel	Contract Lab	EurofinsLancaster	6/17/2025	27	mg/kg dry	0.97		
Phosphorus, Total	~~EPA6010C~~ Contract Lab RH 7-2-25	RJLeeGroup	6/9/2025	6560	mg/kg	47.5		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	6/17/2025	2500	mg/kg dry	97		
Selenium	Contract Lab	EurofinsLancaster	6/17/2025	3.0	mg/kg dry	0.97		
Zinc	Contract Lab	EurofinsLancaster	6/17/2025	510	mg/kg dry	73		

Printed Date
Wednesday, July 2, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250604011 **Sample Date:** 6/3/2025

Sample ID Number: 250604011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
S	Matrix spike % recovery outside acceptable range

Comments:

Sample composited on June 4 from grabs collected on June 1, June 2, June 3.

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Krissa Hoover

7-2-25

Date

Printed Date
Wednesday, July 2, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250604011 **Sample Date:** 6/3/2025

Sample ID Number: 250604011-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	SM 2540G - 2015	snixon	6/6/2025	34.5	%			

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on June 4 from grabs collected on June 1, June 2, June 3.

Released by:

Larissa Hoover

7-2-25

Date

Printed Date
Wednesday, July 2, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 6/19/2025 3:28:50 AM

JOB DESCRIPTION

Sample composited on June 4 from grabs 6/1,6/2,6/3
250604011

JOB NUMBER

180-191424-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
6/19/2025 3:28:50 AM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 14
Chain of Custody 16
Receipt Checklists 18

Job Narrative
180-191424-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 6/6/2025 11:55 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-191424-1	250604011-01	Solid	06/03/25 13:00	06/06/25 11:55

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1988 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Client Sample ID: 250604011-01

Lab Sample ID: 180-191424-1
Date Collected: 06/03/25 13:00
Matrix: Solid
Date Received: 06/06/25 11:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			497415	06/09/25 15:23	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250604011-01

Lab Sample ID: 180-191424-1
Date Collected: 06/03/25 13:00
Matrix: Solid
Date Received: 06/06/25 11:55
Percent Solids: 36.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	497483	06/10/25 12:47	MTW	EET PIT
Soluble	Analysis	EPA 9056A		1	1 mL	1 mL	497566	06/11/25 16:44	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3050B			1.13 g	100 mL	657863	06/15/25 22:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			659728	06/18/25 15:29	LHF4	ELLE
	Instrument ID: E07 - 27813									
Total/NA	Prep	3050B			1.13 g	100 mL	657863	06/15/25 22:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			659138	06/17/25 17:56	LHF4	ELLE
	Instrument ID: E10									
Total/NA	Prep	351.2			0.24 g	25 mL	659084	06/17/25 19:30	TC7D	ELLE
Total/NA	Analysis	351.2		20			659553	06/18/25 12:51	JCG7	ELLE
	Instrument ID: 25924									
Soluble	Leach	DI Leach			9.97 g	100.0 mL	497592	06/12/25 07:00	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			497676	06/12/25 12:02	RSK	EET PIT
	Instrument ID: SHAMU									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - MTW = Michael Wesoloski
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Prep
  - TC7D = Lillian Sharpa
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - JCG7 = Elena Hess
  - LHF4 = Diamond Boyer

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Client Sample ID: 250604011-01
Date Collected: 06/03/25 13:00
Date Received: 06/06/25 11:55

Lab Sample ID: 180-191424-1
Matrix: Solid
Percent Solids: 36.4

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	5.4		1.4		mg/Kg	☼		06/11/25 18:44	1
Nitrate as N	4.7		1.4		mg/Kg	☼		06/11/25 18:44	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		0.97		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Cadmium	0.81		0.24		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Calcium	60000		97		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Chromium	39		0.97		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Copper	230		0.97		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Lead	47		0.49		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Molybdenum	4.5	^2	0.49		mg/Kg	☼	06/15/25 22:00	06/18/25 15:29	2
Nickel	27		0.97		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Potassium	2500		97		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Selenium	3.0		0.97		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2
Zinc	510		73		mg/Kg	☼	06/15/25 22:00	06/17/25 17:56	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	34000		9200		mg/Kg	☼	06/17/25 19:30	06/18/25 12:51	20
Total Solids (SM 2540G)	36		0.50		%			06/09/25 15:23	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	8.5		2.8		mg/Kg	☼		06/12/25 12:02	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-497483/1-A
Matrix: Solid
Analysis Batch: 497566

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			06/11/25 12:42	1
Nitrate as N	ND		0.50		mg/Kg			06/11/25 12:42	1

Lab Sample ID: LCS 180-497483/2-A
Matrix: Solid
Analysis Batch: 497566

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	12.3		mg/Kg		99	80 - 120
Nitrate as N	12.5	12.3		mg/Kg		99	80 - 120

Lab Sample ID: 180-191443-A-1-D MS
Matrix: Solid
Analysis Batch: 497566

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		21.9	20.5		mg/Kg	☼	94	80 - 120
Nitrate as N	ND		21.9	20.1		mg/Kg	☼	92	80 - 120

Lab Sample ID: 180-191443-A-1-E MSD
Matrix: Solid
Analysis Batch: 497566

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		22.0	19.8		mg/Kg	☼	90	80 - 120	4	15
Nitrate as N	ND		22.0	20.9		mg/Kg	☼	95	80 - 120	4	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-657863/1-A ^2
Matrix: Solid
Analysis Batch: 659138

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657863

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Cadmium	ND		0.10		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Calcium	ND		40		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Chromium	ND		0.40		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Copper	ND		0.40		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Lead	ND		0.20		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Lead	ND		0.20		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Lead	ND		0.20		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Nickel	ND		0.40		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Potassium	ND		40		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Selenium	ND		0.40		mg/Kg		06/15/25 22:00	06/17/25 16:55	2
Zinc	ND		30		mg/Kg		06/15/25 22:00	06/17/25 16:55	2

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-657863/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 659728 — **Prep Batch: 657863**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.20		mg/Kg		06/15/25 22:00	06/18/25 15:24	2

Lab Sample ID: LCS 410-657863/2-A ^2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 659138 — **Prep Batch: 657863**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	48.7		mg/Kg		97	87 - 114
Cadmium	5.00	5.28		mg/Kg		106	88 - 117
Calcium	500	524		mg/Kg		105	84 - 119
Chromium	50.0	52.4		mg/Kg		105	88 - 116
Copper	50.0	53.7		mg/Kg		107	84 - 115
Lead	5.00	5.05		mg/Kg		101	88 - 117
Lead	5.00	5.21		mg/Kg		104	88 - 117
Lead	5.00	5.23		mg/Kg		105	88 - 117
Nickel	50.0	53.0		mg/Kg		106	87 - 115
Potassium	500	508		mg/Kg		102	83 - 118
Selenium	10.0	9.72		mg/Kg		97	87 - 115
Zinc	50.0	51.9		mg/Kg		104	86 - 116

Lab Sample ID: LCS 410-657863/2-A ^2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 659728 — **Prep Batch: 657863**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	5.00	5.04		mg/Kg		101	86 - 119

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-659084/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 659553 — **Prep Batch: 659084**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		06/17/25 19:30	06/18/25 11:57	1

Lab Sample ID: LCS 410-659084/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 659553 — **Prep Batch: 659084**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	496	592		mg/Kg		119	70 - 130

Lab Sample ID: 410-227351-A-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 659553 — **Prep Batch: 659084**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	210	FL	451	273	FL	mg/Kg	☼	15	70 - 130

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: 410-227351-A-1-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 659553 — **Prep Batch: 659084**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	210	FL	ND		mg/Kg	☼	NC	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-497592/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 497676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			06/12/25 11:51	1

Lab Sample ID: LCS 180-497592/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 497676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	21.0		mg/Kg		105	90 - 110

Lab Sample ID: 180-191380-C-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 497676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	ND		29.3	30.7		mg/Kg	☼	105	90 - 110

Lab Sample ID: 180-191380-C-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 497676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND		29.2	29.9		mg/Kg	☼	103	90 - 110	3	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-191368-F-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 497415

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	85		86.0		%		2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

HPLC/IC

Leach Batch: 497483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Soluble	Solid	DI Leach	
MB 180-497483/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-497483/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-191443-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
180-191443-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 497566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Soluble	Solid	EPA 9056A	497483
MB 180-497483/1-A	Method Blank	Soluble	Solid	EPA 9056A	497483
LCS 180-497483/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	497483
180-191443-A-1-D MS	Matrix Spike	Soluble	Solid	EPA 9056A	497483
180-191443-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	497483

Metals

Prep Batch: 657863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Total/NA	Solid	3050B	
MB 410-657863/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-657863/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 659138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Total/NA	Solid	6020B	657863
MB 410-657863/1-A ^2	Method Blank	Total/NA	Solid	6020B	857683
LCS 410-657863/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	657863

Analysis Batch: 659728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Total/NA	Solid	6020B	657863
MB 410-657863/1-A ^2	Method Blank	Total/NA	Solid	6020B	657863
LCS 410-657863/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	657863

General Chemistry

Analysis Batch: 497415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Total/NA	Solid	SM 2540G	
180-191368-F-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

Leach Batch: 497592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Soluble	Solid	DI Leach	
MB 180-497592/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-497592/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-191380-C-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
180-191380-C-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Sample composited on June 4 from grabs 6/1,6/2,6/3

Job ID: 180-191424-1
SDG: 250604011

General Chemistry

Analysis Batch: 497676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Soluble	Solid	EPA 353.2	497592
MB 180-497592/1-A	Method Blank	Soluble	Solid	EPA 353.2	497592
LCS 180-497592/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	497592
180-191380-C-1-C MS	Matrix Spike	Soluble	Solid	EPA 353.2	497592
180-191380-C-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 353.2	497592

Prep Batch: 659084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Total/NA	Solid	351.2	
MB 410-659084/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-659084/1-A	Lab Control Sample	Total/NA	Solid	351.2	
410-227351-A-1-C MS	Matrix Spike	Total/NA	Solid	351.2	
410-227351-A-1-B DU	Duplicate	Total/NA	Solid	351.2	

Analysis Batch: 659553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191424-1	250604011-01	Total/NA	Solid	351.2	659084
MB 410-659084/2-A	Method Blank	Total/NA	Solid	351.2	659084
LCS 410-659084/1-A	Lab Control Sample	Total/NA	Solid	351.2	659084
410-227351-A-1-C MS	Matrix Spike	Total/NA	Solid	351.2	659084
410-227351-A-1-B DU	Duplicate	Total/NA	Solid	351.2	659084

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250604011**

Additional Information : Sample composited on June 4 from grabs collected on June 1, June 2, June 3.

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn			
							Number of Containers					
250604011-01	6/3/25	1300	S	N	C	5 DAY TURN AROUND	1	1	1			
								J3	2.4			
									-0.8			
								#20	1.6			

180-191424 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	6-6-25	0940	[signature]	Eurofins Pgh	6-6-25	9:40
[signature]	EPITNE	6-6-25	11:55	[signature]	EPITNE	6/6/25	1155

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required

COC Analyst Cooler Review: Initials: [signature] Date: 6-6-25 Supervisor Review: Initials: [initials] Date: 6-6-25

Page 1 of 1

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-540078.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-191424-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 6/19/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Sample composited on June 4 from grabs 6/1,6/2,6/3	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_Prep Nitrogen, Total Kjeldahl	6020B/3050B (MOD) PFL Metals by ICP/MS 6020B	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
250604011-01 (180-191424-1)	6/3/25	13:00 Eastern	G	Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment: ② 1400		
Relinquished by:	Date/Time: 6/10/25 1400	Company: ELLE	Received by:	Date/Time: 6/10/25 1400	Company: ELLE	
Relinquished by:	Date/Time: 6/10/25 2030	Company: ELLE	Received by:	Date/Time:	Company:	
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 6/10/25 2030	Company: ELWST	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: R-2.8 C-2.7	

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-191424-1
SDG Number: 250604011

Login Number: 191424
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-191424-1
SDG Number: 250604011

Login Number: 191424
List Number: 2
Creator: Bul, Anthony

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 06/11/25 11:27 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA060620250007
Samples Received: June 6, 2025
Report Date: June 13, 2025
Client Project: 25060411
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250604011-01	PA060620250007-001	06/03/2025, 01:00 PM	Phosphorus	0.656	6560	0.00475	47.5	06/09/2025	P

Comments:

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00398, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10984)
A: AIHA LAP, LLC Accredited (Lab ID 100364)
— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accreditations

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250602010

Sample ID Number: 250602010-01

Customer Sample Number:

Sample Date: 6/1/2025

Sample Type: GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	6/11/2025	See attached report	ug/Kg Dry	50		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	6/6/2025	37	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCB AND SOLIDS GRAB

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

Lerisca Hart

6-30-25

Date

Printed Date

Monday, June 30, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 6/11/2025 7:18:29 AM

JOB DESCRIPTION

Limed Sludge Monthly
250602010

JOB NUMBER

180-191184-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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6/11/2025 7:18:29 AM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 15

Job Narrative
180-191184-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 6/3/2025 2:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.5°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

PCBs
Method 8082A: The following sample required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 250602010-01 (180-191184-1).6215174

Method 8082A: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 250602010-01 (180-191184-1).6239381
4297660

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-191184-1
SDG: 250602010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-191184-1
SDG: 250602010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-191184-1	250602010-01	Solid	06/01/25 09:04	06/03/25 14:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-191184-1
SDG: 250602010

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-191184-1
SDG: 250602010

Client Sample ID: 250602010-01 **Lab Sample ID: 180-191184-1**
Date Collected: 06/01/25 09:04 **Matrix: Solid**
Date Received: 06/03/25 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			497304	06/06/25 12:08	MTW	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250602010-01 **Lab Sample ID: 180-191184-1**
Date Collected: 06/01/25 09:04 **Matrix: Solid**
Date Received: 06/03/25 14:30 **Percent Solids: 33.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	497179	06/05/25 06:45	VJC	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	497436	06/11/25 03:53	JMO	EET PIT
	Instrument ID: CHGC8									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

VJC = Vincent Cervone

Batch Type: Analysis

JMO = John Oravec

MTW = Michael Wesoloski

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-191184-1
SDG: 250602010

Client Sample ID: 250602010-01
Date Collected: 06/01/25 09:04
Date Received: 06/03/25 14:30

Lab Sample ID: 180-191184-1
Matrix: Solid
Percent Solids: 33.2

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg	☼	06/05/25 06:45	06/11/25 03:53	1
PCB-1221	ND		50		ug/Kg	☼	06/05/25 06:45	06/11/25 03:53	1
PCB-1232	ND		50		ug/Kg	☼	06/05/25 06:45	06/11/25 03:53	1
PCB-1242	ND		50		ug/Kg	☼	06/05/25 06:45	06/11/25 03:53	1
PCB-1248	ND		50		ug/Kg	☼	06/05/25 06:45	06/11/25 03:53	1
PCB-1254	**670**		50		ug/Kg	☼	06/05/25 06:45	06/11/25 03:53	1
PCB-1260	ND		50		ug/Kg	☼	06/05/25 06:45	06/11/25 03:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*89*		*17 - 144*	*06/05/25 06:45*	*06/11/25 03:53*	*1*
Tetrachloro-m-xylene (Surr)	*79*		*17 - 144*	*06/05/25 06:45*	*06/11/25 03:53*	*1*
DCB Decachlorobiphenyl (Surr)	*79*		*26 - 142*	*06/05/25 06:45*	*06/11/25 03:53*	*1*
DCB Decachlorobiphenyl (Surr)	*86*		*26 - 142*	*06/05/25 06:45*	*06/11/25 03:53*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**37**		0.50		%			06/06/25 12:08	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-191184-1
SDG: 250602010

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-497179/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 497271 — **Prep Batch: 497179**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		06/05/25 06:45	06/07/25 03:57	1
PCB-1221	ND		17		ug/Kg		06/05/25 06:45	06/07/25 03:57	1
PCB-1232	ND		17		ug/Kg		06/05/25 06:45	06/07/25 03:57	1
PCB-1242	ND		17		ug/Kg		06/05/25 06:45	06/07/25 03:57	1
PCB-1248	ND		17		ug/Kg		06/05/25 06:45	06/07/25 03:57	1
PCB-1254	ND		17		ug/Kg		06/05/25 06:45	06/07/25 03:57	1
PCB-1260	ND		17		ug/Kg		06/05/25 06:45	06/07/25 03:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*119*		*17 - 144*	*06/05/25 06:45*	*06/07/26 03:57*	*1*
Tetrachloro-m-xylene (Surr)	*120*		*17 - 144*	*06/05/25 06:45*	*06/07/26 03:57*	*1*
DCB Decachlorobiphenyl (Surr)	*113*		*26 - 142*	*06/05/25 06:45*	*06/07/25 03:57*	*1*
DCB Decachlorobiphenyl (Surr)	*118*		*26 - 142*	*06/05/25 06:45*	*06/07/25 03:57*	*1*

Lab Sample ID: LCS 180-497179/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 497271 — **Prep Batch: 497179**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1310		ug/Kg		98	53 - 115
PCB-1260	1330	1090		ug/Kg		82	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*97*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*98*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*95*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*96*		*26 - 142*

Lab Sample ID: LCSD 180-497179/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 497271 — **Prep Batch: 497179**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	1330	1310		ug/Kg		98	53 - 115	0	25
PCB-1260	1330	1090		ug/Kg		82	45 - 108	0	23

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*96*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*98*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*92*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*92*		*26 - 142*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-191184-1
SDG: 250602010

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-191291-A-11 DU
Matrix: Solid
Analysis Batch: 497304

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	70			72.1		%				2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-191184-1
SDG: 250602010

GC Semi VOA

Prep Batch: 497179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191184-1	250602010-01	Total/NA	Solid	3541	
MB 180-497179/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-497179/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-497179/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Analysis Batch: 497271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-497179/1-A	Method Blank	Total/NA	Solid	EPA 8082A	497179
LCS 180-497179/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	497179
LCSD 180-497179/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8082A	497179

Analysis Batch: 497436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191184-1	250602010-01	Total/NA	Solid	EPA 8082A	497179

General Chemistry

Analysis Batch: 497304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191184-1	250602010-01	Total/NA	Solid	SM 2540G	
180-191291-A-11 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250602010**

Additional Information : Limed Sludge Monthly

Tests to be Performed: Total Solids, PCB

J10 #20 3.3 -0.8 25

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers					
250602010-01	6/1/25	0904	S	N	G	** 5 day rush**	1					

180-191184 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	6-3-25	1010		Eurofins Pgh	6-3-25	10:10
	EPIINE	6-3-25	1430		EPIINE	6/3/25	1430

COC Analyst Cooler Review: Initials: [illegible] Date: 6-3-25

Supervisor Review: Initials: [illegible] Date: 6-2-25

Page 1 of 1

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-191184-1
SDG Number: 250602010

Login Number: 191184
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250707010 **Sample Date:** 7/6/2025

Sample ID Number: 250707010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	tbradley2	7/22/2025	2369.24	mg/Dry Kg	36.5	L	Spikes recovered low, possibly due to sample matrix interference. The RPD passed.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	tbradley2	7/22/2025	845.82	mg/Wet Kg	13.04	L	Spikes recovered low, possibly due to sample matrix interference. The RPD passed.
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	7/23/2025	20000	mg/kg dry	8600		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	7/14/2025	9.2	mg/kg dry	3.4		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	7/15/2025	13	mg/kg dry	2.8		
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	7/14/2025	<3.4	mg/kg dry	3.4		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/10/2025	36	%	0.50		
Metals								
Arsenic	Contract Lab	EurofinsLancaster	7/21/2025	9.4	mg/kg dry	1.0		
Cadmium	Contract Lab	EurofinsLancaster	7/21/2025	0.95	mg/kg dry	0.25		
Calcium	Contact Lab	EurofinsLancaster	7/21/2025	120000	mg/kg dry	100		
Chromium	Contract Lab	EurofinsLancaster	7/21/2025	41	mg/kg dry	1.0		

Printed Date
Tuesday, August 5, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250707010 **Sample Date:** 7/6/2025

Sample ID Number: 250707010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Copper	Contract Lab	EurofinsPittsburgh	7/21/2025	180	mg/kg dry	1.0		
Lead	Contract Lab	EurofinsLancaster	7/21/2025	54	mg/kg dry	0.51		
Mercury, Total	EPA 7471B	jweaver	7/8/2025	0.53	mg/Dry Kg	0.16		
Molybdenum	Contract Lab	EurofinsLancaster	7/21/2025	12	mg/kg dry	0.51		
Nickel	Contract Lab	EurofinsLancaster	7/21/2025	28	mg/kg dry	1.0		
Phosphorus, Total	~~EPA6010C~~ Contract Lab UH 8-5-25	RJLeeGroup	7/10/2025	6040	mg/kg dry	49.0		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	7/21/2025	2400	mg/kg dry	100		
Selenium	Contract Lab	EurofinsLancaster	7/21/2025	3.4	mg/kg dry	1.0		
Zinc	Contract Lab	EurofinsLancaster	7/21/2025	480	mg/kg dry	76		

Printed Date
Tuesday, August 5, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250707010 **Sample Date:** 7/6/2025

Sample ID Number: 250707010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
L	Possible low bias

Comments:

Sample composited on July 7 from grabs collected on July 1, July 2, July 6.

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hoard 8-5-25

Date

Printed Date
Tuesday, August 5, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250707010 **Sample Date:** 7/6/2025

Sample ID Number: 250707010-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Fixed Solids	SM 2540G - 2015	lfalck	7/7/2025	56.45	%			
Percent Total Solids	SM 2540G - 2015	lfalck	7/7/2025	35.7	%			
Percent Volatile Solids	SM 2540G - 2015	lfalck	7/7/2025	43.55	%			

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on July 7 from grabs collected on July 1, July 2, July 6.

Released by:

Larissa Hawk

8-5-25

Date

Printed Date
Tuesday, August 5, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 7/23/2025 3:03:45 PM

JOB DESCRIPTION

Monthly Limed Sludge
250707010

JOB NUMBER

180-192849-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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7/23/2025 3:03:45 PM

Authorized for release by
Shali Brown, Project Manager II
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(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 15
Chain of Custody 17
Receipt Checklists 20

Job Narrative
180-192849-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 7/8/2025 5:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5°C and 1.7°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: The following sample was diluted due to the nature of the sample matrix: 250707010-01 (180-192849-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

Qualifiers

Metals

Qualifier	Qualifier Description
FH	MS and/or MSD recovery above control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-192849-1	250707010-01	Solid	07/08/25 20:00	07/08/25 17:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

Client Sample ID: 250707010-01 — **Lab Sample ID: 180-192849-1**
Date Collected: 07/06/25 20:00 — **Matrix: Solid**
Date Received: 07/08/25 17:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			499291	07/10/25 11:11	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250707010-01 — **Lab Sample ID: 180-192849-1**
Date Collected: 07/06/25 20:00 — **Matrix: Solid**
Date Received: 07/08/25 17:30 — **Percent Solids: 35.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.0701 g	50 mL	499384	07/11/25 11:20	ERP	EET PIT
Soluble	Analysis	EPA 9056A		2.5	1 mL	1 mL	499485	07/14/25 21:42	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3050B			1.10 g	100 mL	673509	07/18/25 21:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			674270	07/21/25 21:01	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	3050B			1.10 g	100 mL	673509	07/18/25 21:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			674242	07/21/25 16:23	LHF4	ELLE
	Instrument ID: E10									
Total/NA	Prep	351.2			0.26 g	25 mL	673749	07/21/25 05:00	TC7D	ELLE
Total/NA	Analysis	351.2		20			675280	07/23/25 12:46	JCG7	ELLE
	Instrument ID: 25924									
Soluble	Leach	DI Leach			5.04 g	50.0 mL	499465	07/15/25 06:20	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			499564	07/15/25 10:20	RSK	EET PIT
	Instrument ID: SHAMU									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - ERP = Evan Papak
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Prep
  - TC7D = Lillian Sharpe
  - UAMX = Annamarie Kuhns
- Batch Type: Analysis
  - JCG7 = Elena Hess
  - LHF4 = Diamond Boyer

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

Client Sample ID: 250707010-01
Date Collected: 07/06/25 20:00
Date Received: 07/08/25 17:30

Lab Sample ID: 180-192849-1
Matrix: Solid
Percent Solids: 35.8

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		3.4		mg/Kg	☼		07/14/25 21:42	2.5
Nitrate as N	9.2		3.4		mg/Kg	☼		07/14/25 21:42	2.5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.4		1.0		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Cadmium	0.95		0.25		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Calcium	120000		100		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Chromium	41		1.0		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Copper	180		1.0		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Lead	54		0.51		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Molybdenum	12		0.51		mg/Kg	☼	07/18/25 21:00	07/21/25 21:01	2
Nickel	28		1.0		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Potassium	2400		100		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Selenium	3.4		1.0		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2
Zinc	480		76		mg/Kg	☼	07/18/25 21:00	07/21/25 16:23	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	20000		8600		mg/Kg	☼	07/21/25 05:00	07/23/25 12:46	20
Total Solids (SM 2540G)	36		0.50		%			07/10/25 11:11	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	13		2.8		mg/Kg	☼		07/15/25 10:20	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-499384/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 499485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			07/14/25 11:04	1
Nitrate as N	ND		0.50		mg/Kg			07/14/25 11:04	1

Lab Sample ID: LCS 180-499384/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 499485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	12.6		mg/Kg		101	80 - 120
Nitrate as N	12.5	13.7		mg/Kg		110	80 - 120

Lab Sample ID: 180-192934-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 499485

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	2.5		14.1	16.4		mg/Kg	☼	98	80 - 120
Nitrate as N	ND		14.1	14.8		mg/Kg	☼	105	80 - 120

Lab Sample ID: 180-192934-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 499485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	2.5		14.1	16.5		mg/Kg	☼	100	80 - 120	1	15
Nitrate as N	ND		14.1	15.2		mg/Kg	☼	108	80 - 120	3	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-673509/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674242 — **Prep Batch: 673509**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Cadmium	ND		0.10		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Calcium	ND		40		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Chromium	ND		0.40		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Copper	ND		0.40		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Lead	ND		0.20		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Nickel	ND		0.40		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Potassium	ND		40		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Selenium	ND		0.40		mg/Kg		07/18/25 21:00	07/21/25 15:22	2
Zinc	ND		30		mg/Kg		07/18/25 21:00	07/21/25 15:22	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-673509/1-A ^2 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674270 — **Prep Batch: 673509**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.20		mg/Kg		07/18/25 21:00	07/21/25 20:57	2

Lab Sample ID: LCS 410-673509/2-A ^2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674242 — **Prep Batch: 673509**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	49.3		mg/Kg		99	84 - 114
Cadmium	5.00	4.85		mg/Kg		97	85 - 117
Calcium	500	511		mg/Kg		102	81 - 119
Chromium	50.0	47.7		mg/Kg		95	83 - 116
Copper	50.0	48.7		mg/Kg		97	83 - 115
Lead	5.00	5.30		mg/Kg		106	85 - 119
Nickel	50.0	47.9		mg/Kg		96	84 - 116
Potassium	500	495		mg/Kg		99	83 - 118
Selenium	10.0	9.16		mg/Kg		92	83 - 115
Zinc	50.0	47.6		mg/Kg		95	84 - 116

Lab Sample ID: LCS 410-673509/2-A ^2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674270 — **Prep Batch: 673509**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	5.00	4.96		mg/Kg		99	83 - 119

Lab Sample ID: 410-232394-B-1-B MS ^2 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674242 — **Prep Batch: 673509**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	1.9		42.7	44.1		mg/Kg	☼	99	75 - 125
Cadmium	ND		4.27	4.38		mg/Kg	☼	102	75 - 125
Calcium	270		427	710		mg/Kg	☼	104	75 - 125
Chromium	7.7		42.7	50.9		mg/Kg	☼	101	75 - 125
Copper	3.3		42.7	46.3		mg/Kg	☼	101	75 - 125
Lead	3.8		4.27	8.33		mg/Kg	☼	106	75 - 125
Nickel	5.1		42.7	48.5		mg/Kg	☼	102	75 - 125
Potassium	550	FH	427	1170	FH	mg/Kg	☼	146	75 - 125
Selenium	ND		8.54	8.54		mg/Kg	☼	100	75 - 125
Zinc	ND		42.7	52.5		mg/Kg	☼	102	75 - 125

Lab Sample ID: 410-232394-B-1-C MSD ^2 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674242 — **Prep Batch: 673509**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1.9		48.8	47.6		mg/Kg	☼	94	75 - 125	8	20
Cadmium	ND		4.88	4.71		mg/Kg	☼	97	75 - 125	7	20
Calcium	270		488	851		mg/Kg	☼	120	75 - 125	18	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-232394-B-1-C MSD ^2 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674242 — **Prep Batch: 673509**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	7.7		48.8	56.9		mg/Kg	☼	101	75 - 125	11	20
Copper	3.3		48.8	50.8		mg/Kg	☼	98	75 - 125	9	20
Lead	3.8		4.88	9.12		mg/Kg	☼	109	75 - 125	9	20
Nickel	5.1		48.8	52.2		mg/Kg	☼	97	75 - 125	7	20
Potassium	550	FH	488	1410	FH	mg/Kg	☼	177	75 - 125	19	20
Selenium	ND		9.75	9.05		mg/Kg	☼	93	75 - 125	6	20
Zinc	ND		48.8	58.5		mg/Kg	☼	102	75 - 125	11	20

Lab Sample ID: 410-232394-C-1-A DU ^2 — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674242 — **Prep Batch: 673509**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	1.9		1.95		mg/Kg	☼	5	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Calcium	270		225		mg/Kg	☼	17	20
Chromium	7.7		7.85		mg/Kg	☼	2	20
Copper	3.3		3.24		mg/Kg	☼	0.5	20
Lead	3.8		3.88		mg/Kg	☼	2	20
Nickel	5.1		5.10		mg/Kg	☼	0.5	20
Potassium	550	FH	490		mg/Kg	☼	11	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Zinc	ND		ND		mg/Kg	☼	NC	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-673749/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675080 — **Prep Batch: 673749**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		07/21/25 05:00	07/22/25 11:26	1

Lab Sample ID: LCS 410-673749/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675080 — **Prep Batch: 673749**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	533	419		mg/Kg		79	70 - 130

Lab Sample ID: 590-31921-A-2-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675280 — **Prep Batch: 673749**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	45000	4	3570	39000	4	mg/Kg	☼	-156	70 - 130

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 590-31921-A-2-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675280 — **Prep Batch: 673749**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	45000	4	33000	F5	mg/Kg	☼	30	20

Lab Sample ID: 590-31921-A-2-C TRL — **Client Sample ID: TRIP**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675280 — **Prep Batch: 673749**

Analyte	Sample Result	Sample Qualifier	TRL Result	TRL Qualifier	Unit	D	RSD	RSD Limit
Total Kjeldahl Nitrogen	45000	4	36300		mg/Kg	☼	16	

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-499465/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 499564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			07/15/25 10:08	1

Lab Sample ID: LCS 180-499465/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 499564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	18.7		mg/Kg		93	90 - 110

Lab Sample ID: 180-193047-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 499564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	ND	FL	36.0	32.5	FL	mg/Kg	☼	87	90 - 110

Lab Sample ID: 180-193047-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 499564

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND	FL	35.9	33.4		mg/Kg	☼	90	90 - 110	3	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-192851-B-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499291

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	72		72.0		%		0.4	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

HPLC/IC

Leach Batch: 499384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Soluble	Solid	DI Leach	
MB 180-499384/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-499384/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-192934-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
180-192934-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 499485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Soluble	Solid	EPA 9056A	499384
MB 180-499384/1-A	Method Blank	Soluble	Solid	EPA 9056A	499384
LCS 180-499384/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	499384
180-192934-A-1-B MS	Matrix Spike	Soluble	Solid	EPA 9056A	499384
180-192934-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	499384

Metals

Prep Batch: 673509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Total/NA	Solid	3050B	
MB 410-673509/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-673509/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
410-232394-B-1-B MS ^2	Matrix Spike	Total/NA	Solid	3050B	
410-232394-B-1-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-232394-C-1-A DU ^2	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 674242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Total/NA	Solid	6020B	673509
MB 410-673509/1-A ^2	Method Blank	Total/NA	Solid	6020B	673509
LCS 410-673509/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	673509
410-232394-B-1-B MS ^2	Matrix Spike	Total/NA	Solid	6020B	673509
410-232394-B-1-C MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	6020B	673509
410-232394-C-1-A DU ^2	Duplicate	Total/NA	Solid	6020B	673509

Analysis Batch: 674270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Total/NA	Solid	6020B	673509
MB 410-673509/1-A ^2	Method Blank	Total/NA	Solid	6020B	673509
LCS 410-673509/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	673509

General Chemistry

Analysis Batch: 499291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Total/NA	Solid	SM 2540G	
180-192851-B-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

Leach Batch: 499465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Soluble	Solid	DI Leach	
MB 180-499465/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-499465/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Monthly Limed Sludge

Job ID: 180-192849-1
SDG: 250707010

General Chemistry (Continued)

Leach Batch: 499465 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193047-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
180-193047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 499564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Soluble	Solid	EPA 353.2	499465
MB 180-499465/1-A	Method Blank	Soluble	Solid	EPA 353.2	499465
LCS 180-499465/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	499465
180-193047-A-1-B MS	Matrix Spike	Soluble	Solid	EPA 353.2	499465
180-193047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 353.2	499465

Prep Batch: 673749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Total/NA	Solid	351.2	
MB 410-673749/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-673749/1-A	Lab Control Sample	Total/NA	Solid	351.2	
590-31921-A-2-D MS	Matrix Spike	Total/NA	Solid	351.2	
590-31921-A-2-B DU	Duplicate	Total/NA	Solid	351.2	
590-31921-A-2-C TRL	TRIP	Total/NA	Solid	351.2	

Analysis Batch: 675080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-673749/2-A	Method Blank	Total/NA	Solid	351.2	673749
LCS 410-673749/1-A	Lab Control Sample	Total/NA	Solid	351.2	673749

Analysis Batch: 675280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192849-1	250707010-01	Total/NA	Solid	351.2	673749
590-31921-A-2-D MS	Matrix Spike	Total/NA	Solid	351.2	673749
590-31921-A-2-B DU	Duplicate	Total/NA	Solid	351.2	673749
590-31921-A-2-C TRL	TRIP	Total/NA	Solid	351.2	673749

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250707010**

Additional Information : Sample composited on July 7 from grabs collected on July 1, July 2, July 6.

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn			
							Number of Containers					
250707010-01	7/6/25	2000	S	N	C	5 DAY TURN AROUND	1	1	1			

180-192849 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	07 07 25	1425	[signature]	Eurofins Pgh	7-8-25	1525
[signature]	EPITAE	7-8-25	1730	[signature]	EPITAE	7/8/25	1730
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required

COC Analyst Cooler Review: Initials: [illegible] Date: 7-7-25 Supervisor Review: Initials: SJ Date: 7-7-25

Alcosan #20 -0.8

J11	2.3	1.5
J12	2.5	1.7

180-192849 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-541947.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-192849-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 7/21/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Sample composited on July 7 from grabs July 1-5	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_PrepNitrogen, Total Kjeldahl	6020B/3050B(MOD) PPL Metals by ICP/MS 6020B	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X			X	
250707010-01 (180-192849-1)	7/6/25	20:00 Eastern	G	Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 7/11/25 1800	Company: [signature]	Received by: [signature]	Date/Time: 7/11/25 1400	Company: ELLE
Relinquished by: [signature]	Date/Time: 7/11/25 1910	Company: ELLE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 7/11/25 1910	Company: ELLET
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 21/21		

Ver: 10/10/2024

7/23/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192849-1
SDG Number: 250707010

Login Number: 192849
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192849-1
SDG Number: 250707010

Login Number: 192849
List Number: 2
Creator: McCaskey, Jonathan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/12/25 11:33 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA080720250031
Samples Received: July 8, 2025
Report Date: July 15, 2025
Client Project: 250707010
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250707010-01	PA080720250031-001	07/06/2025, 08:00 PM	Phosphorus	0.604	6040	0.00490	49.0	07/10/2025	P

Comments:

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)
A: AIHA LAP, LLC Accredited (Lab ID 100364)
E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded
B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided
— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accreditations

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropiate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Erin Repine
Laboratory Manager Inorganic Chemistry

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250703010 **Sample Date:** 7/2/2025

Sample ID Number: 250703010-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	7/9/2025	See attached report	ug/Kg Dry	47		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/8/2025	35	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCB AND SOLIDS GRAB

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

Krissa Hoard

8-6-25

Date

Printed Date

Wednesday, August 6, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 7/11/2025 7:58:32 AM

JOB DESCRIPTION

Limed Sludge Monthly
250703010

JOB NUMBER

180-192750-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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7/11/2025 7:58:32 AM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 15

Job Narrative
180-192750-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 7/3/2025 1:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.1°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

PCBs
Method 8082A: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 250703010-01 (180-192750-1), (LCS 180-499176/2-A), (MB 180-499176/1-A), (480-230456-F-16-A), (480-230456-F-16-B MS) and (480-230456-F-16-C MSD).6215174

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 250703010-01 (180-192750-1), (LCS 180-499176/2-A), (MB 180-499176/1-A), (480-230456-F-16-A), (480-230456-F-16-B MS) and (480-230456-F-16-C MSD).6239381
4297660

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-192750-1
SDG: 250703010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-192750-1
SDG: 250703010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-192750-1	250703010-01	Solid	07/02/25 11:03	07/03/25 13:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-192750-1
SDG: 250703010

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Tast Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-192750-1
SDG: 250703010

Client Sample ID: 250703010-01
Date Collected: 07/02/25 11:03
Date Received: 07/03/25 13:30

Lab Sample ID: 180-192750-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			499148	07/08/25 11:49	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250703010-01
Date Collected: 07/02/25 11:03
Date Received: 07/03/25 13:30

Lab Sample ID: 180-192750-1
Matrix: Solid
Percent Solids: 35.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	499176	07/08/25 15:58	DVC	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	499222	07/09/25 14:01	JMO	EET PIT
	Instrument ID: CHGC8									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

DVC = Daniel Capodanno

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-192750-1
SDG: 250703010

Client Sample ID: 250703010-01
Date Collected: 07/02/25 11:03
Date Received: 07/03/25 13:30

Lab Sample ID: 180-192750-1
Matrix: Solid
Percent Solids: 35.3

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		47		ug/Kg	☼	07/08/25 15:58	07/09/25 14:01	1
PCB-1221	ND		47		ug/Kg	☼	07/08/25 15:58	07/09/25 14:01	1
PCB-1232	ND		47		ug/Kg	☼	07/08/25 15:58	07/09/25 14:01	1
PCB-1242	ND		47		ug/Kg	☼	07/08/25 15:58	07/09/25 14:01	1
PCB-1248	ND		47		ug/Kg	☼	07/08/25 15:58	07/09/25 14:01	1
PCB-1254	**200**		47		ug/Kg	☼	07/08/25 15:58	07/09/25 14:01	1
PCB-1260	ND		47		ug/Kg	☼	07/08/25 15:58	07/09/25 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*91*		*17 - 144*	*07/08/25 15:58*	*07/09/25 14:01*	*1*
Tetrachloro-m-xylene (Surr)	*86*		*17 - 144*	*07/08/25 15:58*	*07/09/25 14:01*	*1*
DCB Decachlorobiphenyl (Surr)	*88*		*28 - 142*	*07/08/25 15:58*	*07/09/25 14:01*	*1*
DCB Decachlorobiphenyl (Surr)	*86*		*26 - 142*	*07/08/25 15:58*	*07/09/25 14:01*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**35**		0.50		%			07/08/25 11:49	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-192750-1
SDG: 250703010

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-499176/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1221	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1232	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1242	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1248	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1254	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1260	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*17*		*17 - 144*	*07/08/25 15:58*	*07/09/25 13:25*	*1*
Tetrachloro-m-xylene (Surr)	*18*		*17 - 144*	*07/08/25 15:58*	*07/09/25 13:25*	*1*
DCB Decachlorobiphenyl (Surr)	*79*		*26 - 142*	*07/08/25 15:58*	*07/09/25 13:25*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*26 - 142*	*07/08/25 15:58*	*07/09/25 13:25*	*1*

Lab Sample ID: LCS 180-499176/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1350		ug/Kg		102	53 - 115
PCB-1260	1330	1170		ug/Kg		88	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*112*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*111*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*98*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*96*		*26 - 142*

Lab Sample ID: 480-230456-F-16-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		1300	1050		ug/Kg		81	53 - 115
PCB-1260	ND		1300	986		ug/Kg		76	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*88*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*86*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*84*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*87*		*26 - 142*

Lab Sample ID: 480-230456-F-16-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1320	1030		ug/Kg		79	53 - 115	2	25

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-192750-1
SDG: 250703010

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-230456-F-16-C MSD
Matrix: Solid
Analysis Batch: 499222

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499176

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		1320	955		ug/Kg		73	45 - 108	3	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*84*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*84*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*83*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*83*		*26 - 142*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-192755-C-1 DU
Matrix: Solid
Analysis Batch: 499148

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	28		26.9		%		5	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-192750-1
SDG: 250703010

GC Semi VOA

Prep Batch: 499176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192750-1	250703010-01	Total/NA	Solid	3541	
MB 180-499176/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-499176/2-A	Lab Control Sample	Total/NA	Solid	3541	
480-230456-F-16-B MS	Matrix Spike	Total/NA	Solid	3541	
480-230456-F-16-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 499222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192750-1	250703010-01	Total/NA	Solid	EPA 8082A	499176
MB 180-499176/1-A	Method Blank	Total/NA	Solid	EPA 6082A	499176
LCS 180-499176/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	499176
480-230456-F-16-B MS	Matrix Spike	Total/NA	Solid	EPA 8082A	499176
480-230456-F-16-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	499176

General Chemistry

Analysis Batch: 499148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192750-1	250703010-01	Total/NA	Solid	SM 2540G	
180-192755-C-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250703010**

Additional Information : Limed Sludge Monthly

Tests to be Performed: Total Solids, PCB

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers					
250703010-01	7/2/25	1103	S	N	G	** 5 day rush**	1					
						JI #20						
						CF-0.8						
						2.9/2.1						

180-192750 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	7-3-25	1000	[signature]	Eurofins Pgh	7-3-25	1000
[signature]	EPTNE	7-3-25	1330	[signature]	EPTNE	7-3-25	1330

COC Analyst Cooler Review: Initials: [illegible] Date: 7-3-25

Supervisor Review: Initials: SJ Date: 7-3-25

Page 1 of 1

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192750-1
SDG Number: 250703010

Login Number: 192750
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250806009 **Sample Date:** 8/5/2025

Sample ID Number: 250806009-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	8/14/2025	21000	mg/Dry Kg	9700		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	8/14/2025	9.9	mg/kg dry	1.4		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	8/12/2025	14	mg/kg dry	2.8		
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	8/14/2025	30	mg/kg dry	1.4		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	8/11/2025	36	%	0.50		
Metals								
Arsenic	Contract Lab	EurofinsLancaster	8/14/2025	6.5	mg/kg dry	1.1		
Cadmium	Contract Lab	EurofinsLancaster	8/14/2025	0.97	mg/kg dry	0.27		
Calcium	Contact Lab	EurofinsLancaster	8/14/2025	140000	mg/kg dry	1100		
Chromium	Contract Lab	EurofinsLancaster	8/14/2025	41	mg/kg dry	1.1		
Copper	Contract Lab	EurofinsLancaster	8/14/2025	230	mg/kg dry	1.1		
Lead	Contract Lab	EurofinsLancaster	8/14/2025	34	mg/kg dry	0.53		

Printed Date
Thursday, September 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250806009 **Sample Date:** 8/5/2025

Sample ID Number: 250806009-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Mercury, Total	Contract Lab	EurofinsLancaster	8/22/2025	0.37	mg/kg dry	0.18		Subcontract lab accidentally ran Mercury twice on the same sample, even though it was not requested. Highest result is reported. (Alternate result: 0.33 mg/Kg dry analyzed on 8/22/25 at 1616)
Molybdenum	Contract Lab	EurofinsLancaster	8/14/2025	15	mg/kg dry	0.53		
Nickel	Contract Lab	EurofinsLancaster	8/14/2025	25	mg/kg dry	1.1		
Phosphorus, Total	EPA6010C	RJLeeGroup	8/14/2025	11500	mg/kg	49.9		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	8/14/2025	1600	mg/kg dry	110		
Selenium	Contract Lab	EurofinsLancaster	8/14/2025	3.0	mg/kg dry	1.1		
Zinc	Contract Lab	EurofinsLancaster	8/14/2025	540	mg/kg dry	80		

Printed Date
Thursday, September 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250806009 **Sample Date:** 8/5/2025

Sample ID Number: 250806009-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on AUG 6 from grabs collected on AUG 3, AUG 4, & AUG 5.

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

9-11-25

Date

Printed Date
Thursday, September 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250806009 **Sample Date:** 8/5/2025

Sample ID Number: 250806009-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Fixed Solids	SM 2540G - 2015	bbatson	8/8/2025	46.35	%			
Percent Total Solids	SM 2540G - 2015	bbatson	8/8/2025	34.3	%			
Percent Volatile Solids	SM 2540G - 2015	bbatson	8/8/2025	53.65	%			

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on AUG 6 from grabs collected on AUG 3, AUG 4, & AUG 5.

Released by:

Teresa Hawk

9-11-25

Date

Printed Date

Thursday, September 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250806009 **Sample Date:** 8/5/2025

Sample ID Number: 250806009-01B **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	jsabo	8/18/2025	2578	mg/Dry Kg	32.4	H	Matrix Spike recovered high. The Matrix Spike Duplicate and RPD passed.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	jsabo	8/18/2025	884	mg/Wet Kg	11.1	H	Matrix Spike recovered high. The Matrix Spike Duplicate and RPD passed.

Data Qualifier	Data Qualifier Description
H	Possible high bias

Comments:

Sample composited on AUG 6 from grabs collected on AUG 3, AUG 4, & AUG 5.

Released by:

9-11-25

Date

Printed Date
Thursday, September 11, 2025

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA080820250014
Samples Received: August 7, 2025
Report Date: August 15, 2025
Client Project: 250806009
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250806009-01	PA080820250014-001	08/06/2025 NP	Phosphorus	1.15	11600	0.00499	49.9	08/14/2025	P

Comments: Sample results reported on a dried weight basis.

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10984)

A: AIHA LAP, LLC Accredited (Lab ID 100364)
→ : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part of any of the above scopes of accreditations

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 8/27/2025 4:54:31 PM

JOB DESCRIPTION

Limed Sludge Monthly
250806009

JOB NUMBER

180-194499-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shali Brown, Project Manager II
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(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 12
Chain of Custody 13
Receipt Checklists 15

Job Narrative
180-194499-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 8/15/2025 11:34 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.
Total Solids was received out of hold time; the client wwas contacted and instructed the lab to proceed with analysis for dry weight out of hold.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194499-1
SDG: 250806009

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194499-1
SDG: 250806009

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	08-24-25

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194499-1
SDG: 250806009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-194499-1	250806009-01	Solid	08/05/25 17:00	08/15/25 11:34	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194499-1
SDG: 250806009

Method	Method Description	Protocol	Laboratory
7471A	Mercury (CVAA)	SW846	ELLE
7471A	Preparation, Mercury	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194499-1
SDG: 250806009

Client Sample ID: 250806009-01
Date Collected: 08/05/25 17:00
Date Received: 08/15/25 11:34

Lab Sample ID: 180-194499-1
Matrix: Solid
Percent Solids: 33.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			0.60 g	100 mL	688892	08/22/25 11:30	HNC4	ELLE
Total/NA	Analysis	7471A		1			689463	08/22/25 14:48	HNC4	ELLE
	Instrument ID: M10 – 31820									

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE
- Batch Type: Prep
  - HNC4 = Mindy Schantzenbach
- Batch Type: Analysis
  - HNC4 = Mindy Schantzenbach

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194499-1
SDG: 250806009

Client Sample ID: 250806009-01
Date Collected: 08/05/25 17:00
Date Received: 08/15/25 11:34

Lab Sample ID: 180-194499-1
Matrix: Solid
Percent Solids: 33.9

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.37		0.18		mg/Kg	☼	08/22/25 11:30	08/22/25 14:48	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194499-1
SDG: 250806009

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 410-688892/1-A
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688892

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		08/22/25 11:30	08/22/25 14:25	1

Lab Sample ID: LCS 410-688892/2-A
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.150		mg/Kg		90	80 - 120

Lab Sample ID: 110-758-G-10-A MS
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 688892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		4.73	4.75		mg/Kg	☼	100	80 - 120

Lab Sample ID: 110-758-H-10-A MSD
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 688892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		4.58	4.37		mg/Kg	☼	95	80 - 120	8	20

Lab Sample ID: 110-758-I-10-A DU
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 688892

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194499-1
SDG: 250806009

Metals

Prep Batch: 688892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194499-1	250806009-01	Total/NA	Solid	7471A	
MB 410-688892/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 410-688892/2-A	Lab Control Sample	Total/NA	Solid	7471A	
110-758-G-10-A MS	Matrix Spike	Total/NA	Solid	7471A	
110-758-H-10-A MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	
110-758-I-10-A DU	Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 689463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194499-1	250806009-01	Total/NA	Solid	7471A	688892
MB 410-688892/1-A	Method Blank	Total/NA	Solid	7471A	688892
LCS 410-688892/2-A	Lab Control Sample	Total/NA	Solid	7471A	688892
110-758-G-10-A MS	Matrix Spike	Total/NA	Solid	7471A	688892
110-758-H-10-A MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	688892
110-758-I-10-A DU	Duplicate	Total/NA	Solid	7471A	688892

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

alcosan

ALCOSAN LIMS ID: **250806009**

Additional Information: Limed Sludge Monthly

Sample composited on AUG 6 from grabs collected on AUG 3, AUG 4, & AUG 5.

Tests to be Performed: Mercury, Total

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers
250806009-01	8/5/25	1700	S	N	C	5 DAY TURN AROUND	1

180-194499 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	8/7/25	0950	[signature]	Eurofins Pgh	8-15-25	9:50
[signature]	EPITNE	8-15-25	11:34	[signature]	EPITNE	8/15/25	1134

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results. PADEP Accredited test methods required

COC Analyst Cooler Review: Initials: [initials] Date: 8/15/25 Supervisor Review: Initials: [initials] Date: 8-14-25

Page 1 of 1

Alcosan #25 +0.1

T2 2.1 → 2.2

180-194499 Waybill

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-194499-1
SDG Number: 250806009

Login Number: 194499
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-194499-1
SDG Number: 250806009

Login Number: 194499
List Number: 2
Creator: McDonald, Teigan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 08/19/25 12:27 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	False	Refer to Job Narrative for details.
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
There are no discrepancies between the containers received and the COC.	N/A	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 8/23/2025 8:48:11 AM

JOB DESCRIPTION

Limed Sludge Monthly
250806009

JOB NUMBER

180-194199-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

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PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 11
QC Sample Results 12
QC Association Summary 16
Chain of Custody 18
Receipt Checklists 21

Job Narrative
180-194199-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 8/8/2025 4:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.8°C, 2.0°C and 2.2°C.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Qualifiers

Metals

Qualifier	Qualifier Description
FH	MS and/or MSD recovery above control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-194199-1	250806009-01	Solid	08/05/25 17:00	08/08/25 16:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7471A	Mercury (CVAA)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
7471A	Preparation, Mercury	SW846	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Client Sample ID: 250806009-01
Date Collected: 08/05/25 17:00
Date Received: 08/08/25 16:30

Lab Sample ID: 180-194199-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			501087	08/11/25 11:36	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250806009-01
Date Collected: 08/05/25 17:00
Date Received: 08/08/25 16:30

Lab Sample ID: 180-194199-1
Matrix: Solid
Percent Solids: 35.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.0583 g	50 mL	501157	08/12/25 12:53	ERP	EET PIT
Soluble	Analysis	EPA 9056A		1	1 mL	1 mL	501289	08/14/25 23:13	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3050B			1.05 g	100 mL	685254	08/14/25 01:50	UJL8	ELLE
Total/NA	Analysis	6020B		2			685626	08/14/25 09:53	SAM2	ELLE
	Instrument ID: E08 - 30647									
Total/NA	Prep	3050B			1.05 g	100 mL	685254	08/14/25 01:50	UJL8	ELLE
Total/NA	Analysis	6020B		20			685626	08/14/25 10:21	SAM2	ELLE
	Instrument ID: E08 - 30647									
Total/NA	Prep	7471A			0.61 g	100 mL	689044	08/22/25 11:30	HNC4	ELLE
Total/NA	Analysis	7471A		1			689463	08/22/25 16:16	HNC4	ELLE
	Instrument ID: M10 – 31820									
Total/NA	Prep	351.2			0.23 g	25 mL	684620	08/12/25 20:00	TC7D	ELLE
Total/NA	Analysis	351.2		20			685585	08/14/25 09:47	JCG7	ELLE
	Instrument ID: 5791									
Soluble	Leach	DI Leach			5.00 g	50.0 mL	501067	08/11/25 08:15	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			501147	08/12/25 11:13	RSK	EET PIT
	Instrument ID: SHAMU									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Analyst References:

Lab: EET PIT

Batch Type: Leach

ERP = Evan Papak

RSK = Robert Kurtz

Batch Type: Analysis

ELS = Edwin Shireman

ERP = Evan Papak

RSK = Robert Kurtz

Lab: ELLE

Batch Type: Prep

HNC4 = Mindy Schantzenbach

TC7D = Lillian Sharpe

UJL8 = James Mertz

Batch Type: Analysis

HNC4 = Mindy Schantzenbach

JCG7 = Elena Hess

SAM2 = Matthew Olley

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Client Sample ID: 250806009-01
Date Collected: 08/05/25 17:00
Date Received: 08/08/25 16:30

Lab Sample ID: 180-194199-1
Matrix: Solid
Percent Solids: 35.7

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	30		1.4		mg/Kg	☼		08/14/25 23:13	1
Nitrate as N	9.9		1.4		mg/Kg	☼		08/14/25 23:13	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.5		1.1		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Cadmium	0.97		0.27		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Calcium	140000		1100		mg/Kg	☼	08/14/25 01:50	08/14/25 10:21	20
Chromium	41		1.1		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Copper	230		1.1		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Lead	34		0.53		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Molybdenum	15		0.53		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Nickel	25		1.1		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Potassium	1600		110		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Selenium	3.0		1.1		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2
Zinc	540		80		mg/Kg	☼	08/14/25 01:50	08/14/25 09:53	2

Method: SW846 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.33		0.17		mg/Kg	☼	08/22/25 11:30	08/22/25 16:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	21000		9700		mg/Kg	☼	08/12/25 20:00	08/14/25 09:47	20
Total Solids (SM 2540G)	36		0.50		%			08/11/25 11:36	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	14		2.8		mg/Kg	☼		08/12/25 11:13	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-501157/1-A
Matrix: Solid
Analysis Batch: 501269

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			08/14/25 22:00	1
Nitrate as N	ND		0.50		mg/Kg			08/14/25 22:00	1

Lab Sample ID: LCS 180-501157/2-A
Matrix: Solid
Analysis Batch: 501269

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	14.9		mg/Kg		120	80 - 120
Nitrate as N	12.5	13.5		mg/Kg		108	80 - 120

Lab Sample ID: 180-194203-A-1-B MS
Matrix: Solid
Analysis Batch: 501269

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		14.3	16.5		mg/Kg	☼	115	80 - 120
Nitrate as N	ND		14.3	14.2		mg/Kg	☼	96	80 - 120

Lab Sample ID: 180-194203-A-1-C MSD
Matrix: Solid
Analysis Batch: 501269

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		14.2	16.3		mg/Kg	☼	115	80 - 120	1	15
Nitrate as N	ND		14.2	14.6		mg/Kg	☼	100	80 - 120	3	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-685254/1-A
Matrix: Solid
Analysis Batch: 685626

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 685254

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Cadmium	ND		0.10		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Calcium	ND		40		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Chromium	ND		0.40		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Copper	ND		0.40		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Lead	ND		0.20		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Molybdenum	ND		0.20		mg/Kg		08/14/26 01:50	08/14/25 09:36	2
Nickel	ND		0.40		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Potassium	ND		40		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Selenium	ND		0.40		mg/Kg		08/14/25 01:50	08/14/25 09:36	2
Zinc	ND		30		mg/Kg		08/14/25 01:50	08/14/25 09:36	2

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-685254/2-A
Matrix: Solid
Analysis Batch: 685626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 685254

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	51.4		mg/Kg		103	84 - 114
Cadmium	5.00	5.25		mg/Kg		105	85 - 117
Calcium	500	534		mg/Kg		107	81 - 119
Chromium	50.0	51.4		mg/Kg		103	83 - 116
Copper	50.0	50.6		mg/Kg		101	83 - 115
Lead	5.00	5.18		mg/Kg		104	85 - 119
Molybdenum	5.00	5.36		mg/Kg		107	83 - 119
Nickel	50.0	51.4		mg/Kg		103	84 - 116
Potassium	500	504		mg/Kg		101	83 - 118
Selenium	10.0	9.99		mg/Kg		100	83 - 115
Zinc	50.0	51.8		mg/Kg		104	84 - 116

Lab Sample ID: 410-235877-A-11-C MS
Matrix: Solid
Analysis Batch: 685626

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 685254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	0.78		38.5	39.3		mg/Kg	☼	100	75 - 125
Cadmium	0.30		3.85	4.41		mg/Kg	☼	107	75 - 125
Calcium	130		385	545		mg/Kg	☼	108	75 - 125
Chromium	3.2		38.5	43.0		mg/Kg	☼	103	75 - 125
Copper	1.6		38.5	40.8		mg/Kg	☼	102	75 - 125
Lead	6.3	FH	3.85	10.8		mg/Kg	☼	117	75 - 125
Molybdenum	ND		3.85	4.06		mg/Kg	☼	102	75 - 125
Nickel	1.7		38.5	42.8		mg/Kg	☼	107	75 - 125
Potassium	99	FH	385	584	FH	mg/Kg	☼	126	75 - 125
Selenium	ND		7.70	7.72		mg/Kg	☼	100	75 - 125

Lab Sample ID: 410-235877-A-11-D MSD
Matrix: Solid
Analysis Batch: 685626

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 665254

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	0.78		40.3	42.0		mg/Kg	☼	102	75 - 125	7	20
Cadmium	0.30		4.03	4.63		mg/Kg	☼	107	75 - 125	5	20
Calcium	130		403	556		mg/Kg	☼	106	75 - 125	2	20
Chromium	3.2		40.3	45.1		mg/Kg	☼	104	75 - 125	5	20
Copper	1.6		40.3	43.2		mg/Kg	☼	103	75 - 125	6	20
Lead	6.3	FH	4.03	11.7	FH	mg/Kg	☼	134	75 - 125	8	20
Molybdenum	ND		4.03	4.34		mg/Kg	☼	104	75 - 125	7	20
Nickel	1.7		40.3	43.4		mg/Kg	☼	103	75 - 125	1	20
Potassium	99	FH	403	579		mg/Kg	☼	119	75 - 125	1	20
Selenium	ND		8.06	8.39		mg/Kg	☼	104	75 - 125	8	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-235877-A-11-B DU
Matrix: Solid
Analysis Batch: 685626

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 685254

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.78		0.841		mg/Kg	☼	8	20
Cadmium	0.30		0.346		mg/Kg	☼	14	20
Calcium	130		153		mg/Kg	☼	16	20
Chromium	3.2		3.28		mg/Kg	☼	4	20
Copper	1.6		1.67		mg/Kg	☼	3	20
Lead	6.3	FH	6.35		mg/Kg	☼	1	20
Molybdenum	ND		ND		mg/Kg	☼	NC	20
Nickel	1.7		1.78		mg/Kg	☼	3	20
Potassium	99	FH	103		mg/Kg	☼	4	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Zinc	280	4	316		mg/Kg	☼	12	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 410-689044/1-A
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689044

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		08/22/25 11:30	08/22/25 15:26	1

Lab Sample ID: LCS 410-689044/2-A
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689044

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.152		mg/Kg		91	80 - 120

Lab Sample ID: 180-194503-A-21-C MS
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 689044

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.176	0.190		mg/Kg	☼	89	80 - 120

Lab Sample ID: 180-194503-A-21-D MSD
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 689044

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.170	0.190		mg/Kg	☼	92	80 - 120	0	20

Lab Sample ID: 180-194503-A-21-B DU
Matrix: Solid
Analysis Batch: 689463

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 689044

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: 180-194199-1 MS — **Client Sample ID: 250806009-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 685585 — **Prep Batch: 684620**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	21000		1090	21700	4	mg/Kg	☼	95	70 - 130

Lab Sample ID: 180-194199-1 DU — **Client Sample ID: 250808009-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 685585 — **Prep Batch: 684620**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	21000		18700		mg/Kg	☼	10	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-501067/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 501147

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			08/12/25 11:37	1

Lab Sample ID: LCS 180-501067/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 501147

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	19.8		mg/Kg		99	90 - 110

Lab Sample ID: 180-194027-E-7-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 501147

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	1.7	FL	19.9	3.66	FL	mg/Kg		10	90 - 110

Lab Sample ID: 180-194027-E-7-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 501147

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	1.7	FL	20.0	3.52	FL	mg/Kg		9	90 - 110	4	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-194199-1 DU — **Client Sample ID: 250806009-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 501087

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	36		36.5		%		2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

HPLC/IC

Leach Batch: 501157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Soluble	Solid	DI Leach	
MB 180-501157/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-501157/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-194203-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
180-194203-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 501269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Soluble	Solid	EPA 9056A	501157
MB 180-501157/1-A	Method Blank	Soluble	Solid	EPA 9056A	501157
LCS 180-501157/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	501157
180-194203-A-1-B MS	Matrix Spike	Soluble	Solid	EPA 9056A	501157
180-194203-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	501157

Metals

Prep Batch: 685254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Total/NA	Solid	3050B	
MB 410-685254/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-685254/2-A	Lab Control Sample	Total/NA	Solid	3050B	
410-235877-A-11-C MS	Matrix Spike	Total/NA	Solid	3050B	
410-235877-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-235877-A-11-B DU	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 685626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Total/NA	Solid	6020B	685254
180-194199-1	250806009-01	Total/NA	Solid	6020B	685254
MB 410-685254/1-A	Method Blank	Total/NA	Solid	6020B	685254
LCS 410-685254/2-A	Lab Control Sample	Total/NA	Solid	6020B	685254
410-235877-A-11-C MS	Matrix Spike	Total/NA	Solid	6020B	685254
410-235877-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	6020B	685254
410-235877-A-11-B DU	Duplicate	Total/NA	Solid	6020B	685254

Prep Batch: 689044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Total/NA	Solid	7471A	
MB 410-689044/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 410-689044/2-A	Lab Control Sample	Total/NA	Solid	7471A	
180-194503-A-21-C MS	Matrix Spike	Total/NA	Solid	7471A	
180-194503-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	
180-194503-A-21-B DU	Duplicate	Total/NA	Solid	7471A	

Analysis Batch: 689463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Total/NA	Solid	7471A	689044
MB 410-689044/1-A	Method Blank	Total/NA	Solid	7471A	689044
LCS 410-689044/2-A	Lab Control Sample	Total/NA	Solid	7471A	689044
180-194503-A-21-C MS	Matrix Spike	Total/NA	Solid	7471A	689044
180-194503-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	689044

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194199-1
SDG: 250806009

Metals (Continued)

Analysis Batch: 689463 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194503-A-21-B DU	Duplicate	Total/NA	Solid	7471A	689044

General Chemistry

Leach Batch: 501067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Soluble	Solid	DI Leach	
MB 180-501067/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-501067/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-194027-E-7-G MS	Matrix Spike	Soluble	Solid	DI Leach	
180-194027-E-7-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 501087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Total/NA	Solid	SM 2540G	
180-194199-1 DU	250806009-01	Total/NA	Solid	SM 2540G	

Analysis Batch: 501147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Soluble	Solid	EPA 353.2	501067
MB 180-501067/1-A	Method Blank	Soluble	Solid	EPA 353.2	501067
LCS 180-501067/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	501067
180-194027-E-7-G MS	Matrix Spike	Soluble	Solid	EPA 353.2	501067
180-194027-E-7-H MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 353.2	501067

Prep Batch: 684620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Total/NA	Solid	351.2	
180-194199-1 MS	250806009-01	Total/NA	Solid	351.2	
180-194199-1 DU	250806009-01	Total/NA	Solid	351.2	

Analysis Batch: 685585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194199-1	250806009-01	Total/NA	Solid	351.2	684620
180-194199-1 MS	250806009-01	Total/NA	Solid	351.2	684620
180-194199-1 DU	250806009-01	Total/NA	Solid	351.2	684620

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250806009**

Additional Information : Limed Sludge Monthly

Sample composited on AUG 6 from grabs collected on AUG 3, AUG 4, & AUG 5.

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn			
							Number of Containers					
250806009-01	8/5/25	1700	S	N	C	5 DAY TURN AROUND	1	1	1			

180-194199 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	8.5.25	1455		Eurofins Pgh	8-8-25	1455
	EPTM	8-8-25	1630			8/8/25	1630
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required

COC Analyst Cooler Review: Initials: GL Date: 8-8-25 Supervisor Review: Initials: μ Date: 8-6-25

Alcosan #20 -0.8

J6	2.6	1.8
J7	2.8	2.0
J8	3.0	2.2

180-194199 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-543527.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-194199-1
Address: 2425 New Holland Pike,	Due Date Requested: 8/18/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Limed Sludge Monthly	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_PrepNitrogen, Total Kjeldahl	6020B/3050B(MOD) PPL Metals by ICP/MS 6020B	7471A/7471A_PrepMercury											Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X														X	
250806009-01 (180-194199-1)	8/5/25	17:00 Eastern	G	Solid			X	X	X											2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: AG	Date/Time: 8-11-25 1400	Company: EPHNE	Received by: MCA	Date/Time: 8-11-25 14:37	Company: ELLE
Relinquished by: MCA	Date/Time: 8-11-25 19:16	Company: ELLE	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 8/11/25 1916	Company: ELLE

Custody Seals Intact: ✓ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: C3.0 C3.0

Ver: 10/10/2024

8/23/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-194199-1
SDG Number: 250806009

Login Number: 194199
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-194199-1
SDG Number: 250806009

Login Number: 194199
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 08/12/25 05:07 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250804010 **Sample Date:** 8/3/2025

Sample ID Number: 250804010-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	8/11/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	8/8/2025	35	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCB and Solids Grab

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

8-20-25

Date

Printed Date

Wednesday, August 20, 2025

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ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 8/13/2025 9:38:59 AM

JOB DESCRIPTION

Limed Sludge Monthly
250804010

JOB NUMBER

180-194198-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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8/13/2025 9:38:59 AM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 16

Job Narrative
180-194198-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 8/8/2025 4:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.8°C, 2.0°C and 2.2°C.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194198-1
SDG: 250804010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194198-1
SDG: 250804010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-194198-1	250804010-01	Solid	08/03/25 10:40	08/08/25 16:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194198-1
SDG: 250804010

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194198-1
SDG: 250804010

Client Sample ID: 250804010-01 **Lab Sample ID: 180-194198-1**
Date Collected: 08/03/25 10:40 **Matrix: Solid**
Date Received: 08/08/25 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			500983	08/08/25 17:24	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250804010-01 **Lab Sample ID: 180-194198-1**
Date Collected: 08/03/25 10:40 **Matrix: Solid**
Date Received: 08/08/25 16:30 **Percent Solids: 34.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	501051	08/11/25 05:14	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 uL	1 uL	501078	08/11/25 14:37	JMO	EET PIT
	Instrument ID: CHGC16									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7056

Analyst References:

Lab: EET PIT

Batch Type: Prep

MKK = Mary Kenny

Batch Type: Analysis

ELS = Edwin Shiraman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194198-1
SDG: 250804010

Client Sample ID: 250804010-01
Date Collected: 08/03/25 10:40
Date Received: 08/08/25 16:30

Lab Sample ID: 180-194198-1
Matrix: Solid
Percent Solids: 34.6

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48		ug/Kg	☼	08/11/25 05:14	08/11/25 14:37	1
PCB-1221	ND		48		ug/Kg	☼	08/11/25 05:14	08/11/25 14:37	1
PCB-1232	ND		48		ug/Kg	☼	08/11/25 05:14	08/11/25 14:37	1
PCB-1242	ND		48		ug/Kg	☼	08/11/25 05:14	08/11/25 14:37	1
PCB-1248	ND		48		ug/Kg	☼	08/11/25 05:14	08/11/25 14:37	1
PCB-1254	ND		48		ug/Kg	☼	08/11/25 05:14	08/11/25 14:37	1
PCB-1260	ND		48		ug/Kg	☼	08/11/25 05:14	08/11/25 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*69*		*17 - 144*	*08/11/25 05:14*	*08/11/25 14:37*	*1*
Tetrachloro-m-xylene (Surr)	*70*		*17 - 144*	*08/11/25 05:14*	*08/11/25 14:37*	*1*
DCB Decachlorobiphenyl (Surr)	*62*		*26 - 142*	*08/11/25 05:14*	*08/11/25 14:37*	*1*
DCB Decachlorobiphenyl (Surr)	*86*		*26 - 142*	*08/11/25 05:14*	*08/11/25 14:37*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**35**		0.50		%			08/08/25 17:24	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194198-1
SDG: 250804010

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-501051/1-A
Matrix: Solid
Analysis Batch: 501078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 501051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		08/11/25 05:14	08/11/25 12:44	1
PCB-1221	ND		17		ug/Kg		08/11/25 05:14	08/11/25 12:44	1
PCB-1232	ND		17		ug/Kg		08/11/25 05:14	08/11/25 12:44	1
PCB-1242	ND		17		ug/Kg		08/11/25 05:14	08/11/25 12:44	1
PCB-1248	ND		17		ug/Kg		08/11/25 05:14	08/11/25 12:44	1
PCB-1254	ND		17		ug/Kg		08/11/25 05:14	08/11/25 12:44	1
PCB-1260	ND		17		ug/Kg		08/11/25 05:14	08/11/25 12:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*97*		*17 - 144*	*08/11/25 05:14*	*08/11/25 12:44*	*1*
Tetrachloro-m-xylene (Surr)	*99*		*17 - 144*	*08/11/25 05:14*	*08/11/25 12:44*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*26 - 142*	*08/11/25 05:14*	*08/11/25 12:44*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*26 - 142*	*08/11/25 05:14*	*08/11/25 12:44*	*1*

Lab Sample ID: LCS 180-501051/2-A
Matrix: Solid
Analysis Batch: 501078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 501051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	928		ug/Kg		70	53 - 115
PCB-1260	1330	837		ug/Kg		63	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*86*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*87*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*88*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*87*		*26 - 142*

Lab Sample ID: 180-194186-A-1-A MS
Matrix: Solid
Analysis Batch: 501078

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 501051

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		1520	1030		ug/Kg	☼	68	53 - 115
PCB-1260	ND		1520	889		ug/Kg	☼	58	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*79*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*83*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*82*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*81*		*26 - 142*

Lab Sample ID: 180-194186-A-1-B MSD
Matrix: Solid
Analysis Batch: 501078

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 501051

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1480	1010		ug/Kg	☼	68	53 - 115	2	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-194186-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 501078 — **Prep Batch: 501051**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		1480	883		ug/Kg	☼	60	45 - 108	1	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*82*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*81*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*81*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*82*		*26 - 142*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-194133-C-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 500983

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	8.3		8.84		%		7	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-194198-1
SDG: 250804010

GC Semi VOA

Prep Batch: 501051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194198-1	250804010-01	Total/NA	Solid	3541	
MB 180-501051/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-501051/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-194186-A-1-A MS	Matrix Spike	Total/NA	Solid	3541	
180-194186-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 501078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194198-1	250804010-01	Total/NA	Solid	EPA 8082A	501051
MB 180-501051/1-A	Method Blank	Total/NA	Solid	EPA 8082A	501051
LCS 180-501051/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	501051
180-194188-A-1-A MS	Matrix Spike	Total/NA	Solid	EPA 8082A	501051
180-194186-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	501051

General Chemistry

Analysis Batch: 500983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-194198-1	250804010-01	Total/NA	Solid	SM 2540G	
180-194133-C-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250804010**

Additional Information : Limed Sludge Monthly

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: Total Solids, POB					
							Number of Containers					
250804010-01	8/3/25	1040	S	N	G	** 5 day rush**	1					

180-194198 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	8 8.25	1455		Eurofins Pgh	8-8-25	1455
	EPIIME	8-8-25	1630			8/8/25	1630

COC Analyst Cooler Review: Initials: _____ Date: 8-8-25 Supervisor Review: Initials: JJ Date: 8 4 25

Alcosan #20 -0.8

J6	2.6	1.8
J7	2.8	2.0
J8	3.0	2.2

180-194198 Waybill

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-194198-1
SDG Number: 250804010

Login Number: 194198
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

REVISED

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250904011 **Sample Date:** 9/3/2025

Sample ID Number: 250904011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	jsabo	9/22/2025	2446	mg/Dry Kg	12	H	MS and MSD recovered high, possibly due to sample matrix interferences. MS and MSD RPD passed criteria.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	jsabo	9/22/2025	783	mg/Wet Kg	12	H	MS and MSD recovered high, possibly due to sample matrix interferences. MS and MSD RPD passed criteria.
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	9/11/2025	25000	mg/kg dry	7900		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	9/9/2025	8.0	mg/kg dry	1.3		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	9/9/2025	13	mg/kg dry	2.7		
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	9/9/2025	34	mg/kg dry	1.3		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	9/8/2025	36	%	0.50		
Metals								
Aluminum	Contract Lab	EurofinsLancaster	9/15/2025	6200	mg/kg dry	42		
Arsenic	Contract Lab	EurofinsLancaster	9/15/2025	4.9	mg/kg dry	0.85		

Printed Date
Friday, October 24, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250904011 **Sample Date:** 9/3/2025

Sample ID Number: 250904011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Cadmium	Contract Lab	EurofinsLancaster	9/15/2025	0.71	mg/kg dry	0.21		
Calcium	Contact Lab	EurofinsLancaster	9/15/2025	170000	mg/kg dry	85		
Chromium	Contract Lab	EurofinsLancaster	9/15/2025	32	mg/kg dry	0.85		
Copper	Contract Lab	EurofinsLancaster	9/15/2025	210	mg/kg dry	0.85		
Iron	Contract Lab	EurofinsLancaster	9/15/2025	31000	mg/kg dry	42		
Lead	Contract Lab	EurofinsLancaster	9/15/2025	30	mg/kg dry	0.42		
Mercury, Total	Contract Lab	EurofinsLancaster	9/18/2025	0.28	mg/kg dry	0.18		
Molybdenum	Contract Lab	EurofinsLancaster	9/15/2025	10	mg/kg dry	0.42		
Nickel	Contract Lab	EurofinsLancaster	9/15/2025	19	mg/kg dry	0.85		
Phosphorus, Total	Contract Lab ~~EPA6010C~~ VAH 10-24-25	RJLeeGroup	9/10/2025	6980	mg/kg dry	46.8		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	9/15/2025	1200	mg/kg dry	85		
Selenium	Contract Lab	EurofinsLancaster	9/15/2025	3.0	mg/kg dry	0.85		
Zinc	Contract Lab	EurofinsLancaster	9/15/2025	450	mg/kg dry	63		

Printed Date
Friday, October 24, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250904011 **Sample Date:** 9/3/2025

Sample ID Number: 250904011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
H	Possible high bias

Comments:

Sample composited on September 4 from grabs collected on Sept. 1, Sept. 2, Sept. 3.

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Alisia Hoover

10-24-25

Date

Printed Date
Friday, October 24, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250904011 **Sample Date:** 9/3/2025

Sample ID Number: 250904011-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	SM 2540G - 2015	lfalck	9/8/2025	32.0	%			

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on September 4 from grabs collected on Sept. 1, Sept. 2, Sept. 3.

Released by: Larissa Hoover

10-24-25

Date

Printed Date
Friday, October 24, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 10/23/2025 6:06:42 PM

JOB DESCRIPTION

Limed Sludge Monthly
250904011

JOB NUMBER

180-195780-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
10/23/2025 6:06:42 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 12
Chain of Custody 13
Receipt Checklists 14

Job Narrative
180-195780-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 9/15/2025 11:05 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.5°C, 1.5°C and 1.7°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195780-2
SDG: 250904011

Qualifiers

Metals

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitetion (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195780-2
SDG: 250904011

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195780-2
SDG: 250904011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195780-1	250904011-01	Solid	09/03/25 18:30	09/15/25 11:05	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195780-2
SDG: 250904011

Method	Method Description	Protocol	Laboratory
7471B	Mercury (CVAA)	SW846	ELLE
7471B	Preparation, Mercury	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195780-2
SDG: 250904011

Client Sample ID: 250904011-01
Date Collected: 09/03/25 18:30
Date Received: 09/15/25 11:05

Lab Sample ID: 180-195780-1
Matrix: Solid
Percent Solids: 32.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.62 g	100 mL	701145	09/18/25 15:00	HNC4	ELLE
Total/NA	Analysis	7471B		1			701595	09/18/25 18:50	IJ3I	ELLE
	Instrument ID: M16									

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

HNC4 = Mindy Schantzenbach

Batch Type: Analysis

IJ3I = Elizabeth Brittingham

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195780-2
SDG: 250904011

Client Sample ID: 250904011-01
Date Collected: 09/03/25 18:30
Date Received: 09/15/25 11:05

Lab Sample ID: 180-195780-1
Matrix: Solid
Percent Solids: 32.6

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28		0.18		mg/Kg	☼	09/18/25 15:00	09/18/25 18:50	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195780-2
SDG: 250904011

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-701145/1-A
Matrix: Solid
Analysis Batch: 701595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 701145

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		09/18/25 15:00	09/18/25 18:04	1

Lab Sample ID: LCS 410-701145/2-A
Matrix: Solid
Analysis Batch: 701595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 701145

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.139		mg/Kg		84	80 - 120

Lab Sample ID: 180-195767-B-1-C MSD
Matrix: Solid
Analysis Batch: 701595

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 701145

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.12		0.215	0.342		mg/Kg	☼	102	80 - 120	3	20

Lab Sample ID: 180-195767-N-1-A MS
Matrix: Solid
Analysis Batch: 701595

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 701145

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.12		0.208	0.352		mg/Kg	☼	110	80 - 120

Lab Sample ID: 180-195767-B-1-B DU
Matrix: Solid
Analysis Batch: 701595

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 701145

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	0.12		0.154	F5	mg/Kg	☼	23	20

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195780-2
SDG: 250904011

Metals

Prep Batch: 701145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195780-1	250904011-01	Total/NA	Solid	7471B	
MB 410-701145/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-701145/2-A	Lab Control Sample	Total/NA	Solid	7471B	
180-195767-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
180-195767-N-1-A MS	Matrix Spike	Total/NA	Solid	7471B	
180-195767-B-1-B DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 701595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195780-1	250904011-01	Total/NA	Solid	7471B	701145
MB 410-701145/1-A	Method Blank	Total/NA	Solid	7471B	701145
LCS 410-701145/2-A	Lab Control Sample	Total/NA	Solid	7471B	701145
180-195767-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	701145
180-195767-N-1-A MS	Matrix Spike	Total/NA	Solid	7471B	701145
180-195767-B-1-B DU	Duplicate	Total/NA	Solid	7471B	701145

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250904011**

Additional Information : Limed Sludge Monthly

Sample composited on 9/4 - grabs 9/1,9/2,9/3

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: Mercury					
							Number of Containers					
250904011-01	9/3/25	1830	S	N	C	5 DAY TURN AROUND	1					

180-195780 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	9/15/25	1030		Eurofins Pgh	9-15-25	1030
Relinquished By	Company EPITOME	Date 9-15-25	Time 11:05	Received By	Company	Date 9/15/25	Time 1105
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received". Pittsburgh Test America - % Solids SM2540G to calc. dry weight results required. PADEP Accredited test methods

COC Analyst Cooler Review: Initials: TN Date: 9/15/25

Supervisor Review: Initials: JJ Date: 9-12-25

Page 1 of 1

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-195780-2
SDG Number: 250904011

Login Number: 195780
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-195780-2
SDG Number: 250904011

Login Number: 195780
List Number: 2
Creator: McDonald, Teigan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 09/16/25 10:15 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 9/16/2025 7:37:46 AM

JOB DESCRIPTION

Limed Sludge Monthly 9/1, 9/2, 9/3
250904011

JOB NUMBER

180-195403-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
9/16/2025 7:37:46 AM

Authorized for release by
Shali Brown, Project Manager II
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(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 14
Chain of Custody 16
Receipt Checklists 18

Job Narrative
180-195403-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 9/5/2025 12:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.9°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 180-502561 and analytical batch 180-502557 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195403-1	250904011-01	Solid	09/03/25 18:30	09/05/25 12:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

Client Sample ID: 250904011-01 — **Lab Sample ID: 180-195403-1**
Date Collected: 09/03/25 18:30 — **Matrix: Solid**
Date Received: 09/05/25 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			502553	09/08/25 10:46	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250904011-01 — **Lab Sample ID: 180-195403-1**
Date Collected: 09/03/25 18:30 — **Matrix: Solid**
Date Received: 09/05/25 12:30 — **Percent Solids: 36.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.0952 g	50 mL	502561	09/08/25 13:35	ERP	EET PIT
Soluble	Analysis	EPA 9056A		1	1 mL	1 mL	502557	09/09/25 03:36	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3050B			1.30 g	100 mL	697597	09/14/25 22:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			699753	09/15/25 23:12	I9IN	ELLE
	Instrument ID: E08 - 30647									
Total/NA	Prep	3050B			1.30 g	100 mL	697597	09/14/25 22:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			699497	09/15/25 12:04	F7JF	ELLE
	Instrument ID: E10									
Total/NA	Prep	351.2			0.28 g	25 mL	697218	09/10/25 13:05	NLE3	ELLE
Total/NA	Analysis	351.2		20			698192	09/11/25 18:47	UJE2	ELLE
	Instrument ID: 5791									
Soluble	Leach	DI Leach			5.02 g	50.0 mL	502598	09/09/25 07:01	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			502619	09/09/25 10:39	RSK	EET PIT
	Instrument ID: ASTORIA2									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15236, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - ERP = Evan Papak
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Prep
  - NLE3 = Thomas Schmertz
  - UAMX = Annamarie Kuhns
- Batch Type: Analysis
  - F7JF = Dennis Dick
  - I9IN = Miles Ylengst
  - UJE2 = Joseph McKenzie

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

Client Sample ID: 250904011-01
Date Collected: 09/03/25 18:30
Date Received: 09/05/25 12:30

Lab Sample ID: 180-195403-1
Matrix: Solid
Percent Solids: 36.3

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	34		1.3		mg/Kg	☼		09/09/25 03:36	1
Nitrate as N	8.0		1.3		mg/Kg	☼		09/09/25 03:36	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6200		42		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Arsenic	4.9		0.85		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Cadmium	0.71		0.21		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Calcium	170000		85		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Chromium	32		0.85		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Copper	210		0.85		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Iron	31000		42		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Lead	30		0.42		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Molybdenum	10		0.42		mg/Kg	☼	09/14/25 22:00	09/15/25 23:12	2
Nickel	19		0.85		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Potassium	1200		85		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Selenium	3.0		0.85		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2
Zinc	450		63		mg/Kg	☼	09/14/25 22:00	09/15/25 12:04	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	25000		7900		mg/Kg	☼	09/10/25 13:05	09/11/25 18:47	20
Total Solids (SM 2540G)	36		0.50		%			09/08/25 10:46	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	13		2.7		mg/Kg	☼		09/09/25 10:39	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-502561/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 502557

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			09/09/25 02:23	1
Nitrate as N	ND		0.50		mg/Kg			09/09/25 02:23	1

Lab Sample ID: LCS 180-502561/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 502557

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	13.7		mg/Kg		110	80 - 120
Nitrate as N	12.5	13.2		mg/Kg		105	80 - 120

Lab Sample ID: 180-195169-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 502557

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND	FL	14.8	ND	FL	mg/Kg	☼	0	80 - 120
Nitrate as N	ND	FH	14.8	19.9	FH	mg/Kg	☼	134	80 - 120

Lab Sample ID: 180-195169-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 502557

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND	FL	14.9	ND	FL	mg/Kg	☼	0	80 - 120	NC	15
Nitrate as N	ND	FH	14.9	20.4	FH	mg/Kg	☼	137	80 - 120	2	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-697597/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 699497 — **Prep Batch: 697597**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		20		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Arsenic	ND		0.40		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Cadmium	ND		0.10		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Calcium	ND		40		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Chromium	ND		0.40		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Copper	ND		0.40		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Iron	ND		20		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Lead	ND		0.20		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Nickel	ND		0.40		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Potassium	ND		40		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Selenium	ND		0.40		mg/Kg		09/14/25 22:00	09/15/25 11:09	2
Zinc	ND		30		mg/Kg		09/14/25 22:00	09/15/25 11:09	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-697597/1-A
Matrix: Solid
Analysis Batch: 699753

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 697597

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.20		mg/Kg		09/14/25 22:00	09/15/25 23:05	2

Lab Sample ID: LCS 410-697597/2-A
Matrix: Solid
Analysis Batch: 699497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 697597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	500	488		mg/Kg		98	82 - 119
Arsenic	50.0	47.1		mg/Kg		94	84 - 114
Cadmium	5.00	4.86		mg/Kg		97	85 - 117
Calcium	500	483		mg/Kg		97	81 - 119
Chromium	50.0	48.7		mg/Kg		97	83 - 116
Copper	50.0	49.2		mg/Kg		98	83 - 115
Iron	500	498		mg/Kg		100	84 - 118
Lead	5.00	4.84		mg/Kg		97	85 - 119
Nickel	50.0	49.2		mg/Kg		98	84 - 116
Potassium	500	474		mg/Kg		95	83 - 118
Selenium	10.0	9.45		mg/Kg		95	83 - 115
Zinc	50.0	47.8		mg/Kg		96	84 - 116

Lab Sample ID: LCS 410-697597/2-A
Matrix: Solid
Analysis Batch: 699753

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 697597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	5.00	4.96		mg/Kg		99	83 - 119

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-697218/2-A
Matrix: Solid
Analysis Batch: 697630

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 697218

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		09/10/25 13:05	09/10/25 19:34	1

Lab Sample ID: LCS 410-697218/1-A
Matrix: Solid
Analysis Batch: 697630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 697218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	400	457		mg/Kg		114	70 - 130

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-502596/1-A
Matrix: Solid
Analysis Batch: 502619

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			09/09/25 10:36	1

Lab Sample ID: LCS 180-502596/2-A
Matrix: Solid
Analysis Batch: 502619

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	20.9		mg/Kg		104	90 - 110

Lab Sample ID: 180-195403-1 MS
Matrix: Solid
Analysis Batch: 502619

Client Sample ID: 250904011-01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	13		55.1	64.8		mg/Kg	☼	94	90 - 110

Lab Sample ID: 180-195403-1 MSD
Matrix: Solid
Analysis Batch: 502619

Client Sample ID: 250904011-01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	13		55.0	65.1		mg/Kg	☼	94	90 - 110	0	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-195403-1 DU
Matrix: Solid
Analysis Batch: 502553

Client Sample ID: 250904011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	36		35.4		%		3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

HPLC/IC

Analysis Batch: 502557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Soluble	Solid	EPA 9056A	502561
MB 180-502561/1-A	Method Blank	Soluble	Solid	EPA 9056A	502561
LCS 180-502561/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	502561
180-195169-A-1-E MS	Matrix Spike	Soluble	Solid	EPA 9056A	502561
180-195169-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	502561

Leach Batch: 502561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Soluble	Solid	DI Leach	
MB 180-502561/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-502561/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-195169-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
180-195169-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Metals

Prep Batch: 697597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Total/NA	Solid	3050B	
MB 410-697597/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-697597/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 699497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Total/NA	Solid	6020B	697597
MB 410-697597/1-A	Method Blank	Total/NA	Solid	6020B	697597
LCS 410-697597/2-A	Lab Control Sample	Total/NA	Solid	6020B	697597

Analysis Batch: 699753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Total/NA	Solid	6020B	697597
MB 410-697597/1-A	Method Blank	Total/NA	Solid	6020B	697597
LCS 410-697597/2-A	Lab Control Sample	Total/NA	Solid	6020B	697597

General Chemistry

Analysis Batch: 502553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Total/NA	Solid	SM 2540G	
180-195403-1 DU	250904011-01	Total/NA	Solid	SM 2540G	

Leach Batch: 502596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Soluble	Solid	DI Leach	
MB 180-502596/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-502596/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-195403-1 MS	250904011-01	Soluble	Solid	DI Leach	
180-195403-1 MSD	250904011-01	Soluble	Solid	DI Leach	

Analysis Batch: 502619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Soluble	Solid	EPA 353.2	502596

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 9/1, 9/2, 9/3

Job ID: 180-195403-1
SDG: 250904011

General Chemistry (Continued)

Analysis Batch: 502619 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-502596/1-A	Method Blank	Soluble	Solid	EPA 353.2	502596
LCS 180-502596/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	502596
180-195403-1 MS	250904011-01	Soluble	Solid	EPA 353.2	502596
180-195403-1 MSD	250904011-01	Soluble	Solid	EPA 353.2	502596

Prep Batch: 697218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Total/NA	Solid	351.2	
MB 410-697218/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-697218/1-A	Lab Control Sample	Total/NA	Solid	351.2	

Analysis Batch: 697630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-697218/2-A	Method Blank	Total/NA	Solid	351.2	697218
LCS 410-697218/1-A	Lab Control Sample	Total/NA	Solid	351.2	697218

Analysis Batch: 698192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195403-1	250904011-01	Total/NA	Solid	351.2	697218

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue -- Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250904011**

Additional Information : Limed Sludge Monthly

Sample composited on 9/4 - grabs 9/1,9/2,9/3

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn, Al, Fe	J3 #25	0.8 10.1 0.9
							Number of Containers				
250904011-01	9/3/25	1830	S	N	C	5 DAY TURN AROUND	1	1	1		

180-195403 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	9/5/25	0952		Eurofins Pgh	9-5-25	0952
	EPHANE	9-5-25	1230		EPHANE	9/5/25	1230

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredrted test methods required

COC Analyst Cooler Review: Initials: YH Date: 9/5/25

Supervisor Review: Initials: [illegible] Date: 9.4.25

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-544924.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-195403-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 9/15/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Limed Sludge Monthly 9/1, 9/2, 9/3	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wastewater, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_PrepNitrogen, Total Kjeldahl	6020B/3050B(MOD) PPL Metals by ICP/MS 6020B	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
250904011-01 (180-195403-1)	9/3/25	18:30 Eastern	G	Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	9-8-25 1330	EPITNE	[signature]	9-8-25 16:00	ELLE
[signature]	9-8-25 21:30	ELLE	[signature]		
			[signature]	9/8/25 2130	[signature]

Custody Seals Intact: ☒ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: R: 4.0 C: 4.0

SF

Ver: 10/10/2024

9/16/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-195403-1
SDG Number: 250904011

Login Number: 195403
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-195403-1
SDG Number: 250904011

Login Number: 195403
List Number: 2
Creator: Fuehrer, Stephanie

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 09/09/25 11:44 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-6023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA050920250021
Samples Received: September 5, 2025
Report Date: September 12, 2025
Client Project: 250904011
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
250904011-01	PA050920250021-001	09/03/2025, 06:30 PM	Phosphorus	0.698	6980	0.00468	46.8	09/10/2025	P

Comments:

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10984)
A: AIHA LAP, LLC Accredited (Lab ID 100364)
— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accreditations

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Erin Repine
Laboratory Manager Inorganic Chemistry

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 250902010 **Sample Date:** 9/2/2025

Sample ID Number: 250902010-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	9/9/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	9/8/2025	31	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCB and Solids Grab

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

Larissa Hook

10-3-25

Date

Printed Date

Friday, October 3, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 9/10/2025 7:28:17 AM

JOB DESCRIPTION

Limed Sludge Monthly
250902010

JOB NUMBER

180-195404-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 15

Job Narrative
180-195404-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 9/5/2025 12:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.9°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195404-1
SDG: 250902010

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
FH	MS and/or MSD recovery above control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminent Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195404-1
SDG: 250902010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195404-1
SDG: 250902010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195404-1	250902010-01	Solid	09/02/25 07:18	09/05/25 12:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195404-1
SDG: 250902010

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195404-1
SDG: 250902010

Client Sample ID: 250902010-01 **Lab Sample ID: 180-195404-1**
Date Collected: 09/02/25 07:18 **Matrix: Solid**
Date Received: 09/05/25 12:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			502553	09/08/25 10:46	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250902010-01 **Lab Sample ID: 180-195404-1**
Date Collected: 09/02/25 07:18 **Matrix: Solid**
Date Received: 09/05/25 12:30 **Percent Solids: 31.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	502574	09/08/25 15:06	DVC	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	502591	09/09/25 22:04	JMO	EET PIT
	Instrument ID: CHGC20									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

DVC = Daniel Capodanno

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195404-1
SDG: 250902010

Client Sample ID: 250902010-01
Date Collected: 09/02/25 07:18
Date Received: 09/05/25 12:30

Lab Sample ID: 180-195404-1
Matrix: Solid
Percent Solids: 31.1

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54		ug/Kg	☼	09/08/25 15:06	09/09/25 22:04	1
PCB-1221	ND		54		ug/Kg	☼	09/08/25 15:06	09/09/25 22:04	1
PCB-1232	ND		54		ug/Kg	☼	09/08/25 15:06	09/09/25 22:04	1
PCB-1242	ND		54		ug/Kg	☼	09/08/25 15:06	09/09/25 22:04	1
PCB-1248	ND		54		ug/Kg	☼	09/08/25 15:06	09/09/25 22:04	1
PCB-1254	ND		54		ug/Kg	☼	09/08/25 15:06	09/09/25 22:04	1
PCB-1260	ND		54		ug/Kg	☼	09/08/25 15:06	09/09/25 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*77*		*17 - 144*	*09/08/25 15:06*	*09/09/25 22:04*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*17 - 144*	*09/08/25 15:06*	*09/09/25 22:04*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*26 - 142*	*09/08/25 15:06*	*09/09/25 22:04*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*26 - 142*	*09/08/25 15:06*	*09/09/25 22:04*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	31		0.50		%			09/08/25 10:46	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195404-1
SDG: 250902010

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-502574/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 502591 — **Prep Batch: 502574**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		09/08/25 15:06	09/09/25 15:01	1
PCB-1221	ND		17		ug/Kg		09/08/25 15:06	09/09/25 15:01	1
PCB-1232	ND		17		ug/Kg		09/08/25 15:06	09/09/25 15:01	1
PCB-1242	ND		17		ug/Kg		09/08/25 15:06	09/09/25 15:01	1
PCB-1248	ND		17		ug/Kg		09/08/25 15:06	09/09/25 15:01	1
PCB-1254	ND		17		ug/Kg		09/08/25 15:06	09/09/25 15:01	1
PCB-1260	ND		17		ug/Kg		09/08/25 15:06	09/09/25 15:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*83*		*17 - 144*	*09/08/25 15:06*	*09/09/25 15:01*	*1*
Tetrachloro-m-xylene (Surr)	*87*		*17 - 144*	*09/08/25 15:06*	*09/09/25 15:01*	*1*
DCB Decachlorobiphenyl (Surr)	*87*		*26 - 142*	*09/08/25 15:06*	*09/09/25 15:01*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*26 - 142*	*09/08/25 15:06*	*09/09/25 15:01*	*1*

Lab Sample ID: LCS 180-502574/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 502591 — **Prep Batch: 502574**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1170		ug/Kg		88	53 - 115
PCB-1260	1330	1060		ug/Kg		80	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*92*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*95*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*99*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*93*		*26 - 142*

Lab Sample ID: 180-195386-A-21-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 502591 — **Prep Batch: 502574**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		1610	1560		ug/Kg	☼	97	53 - 115
PCB-1260	ND	FH	1610	2610	FH	ug/Kg	☼	163	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*87*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*90*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*84*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*82*		*26 - 142*

Lab Sample ID: 180-195386-A-21-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 502591 — **Prep Batch: 502574**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1650	1750		ug/Kg	☼	106	53 - 115	11	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-195386-A-21-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 502591 — **Prep Batch: 502574**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND	FH	1650	3440	FH F2	ug/Kg	☼	209	45 - 108	27	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*91*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*93*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*82*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*86*		*26 - 142*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-195403-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 502553

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	36		35.4		%		3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-195404-1
SDG: 250902010

GC Semi VOA

Prep Batch: 502574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195404-1	250902010-01	Total/NA	Solid	3541	
MB 180-502574/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-502574/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-195386-A-21-D MS	Matrix Spike	Total/NA	Solid	3541	
180-195386-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 502591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195404-1	250902010-01	Total/NA	Solid	EPA 8082A	502574
MB 180-502574/1-A	Method Blank	Total/NA	Solid	EPA 8082A	502574
LCS 180-502574/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	502574
180-195386-A-21-D MS	Matrix Spike	Total/NA	Solid	EPA 8082A	502574
180-195386-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	502574

General Chemistry

Analysis Batch: 502553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195404-1	250902010-01	Total/NA	Solid	SM 2540G	
180-195403-A-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250902010**

Additional Information : Limed Sludge Monthly

Tests to be Performed						
Total Solids, PCB	J3 #25	0.8 +0.1 0.9				

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers					
250902010-01	9/2/25	0718	S	N	G	** 5 day rush**	1					

180-195404 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	9/5/25	0952		Eurofins Pgh	9-5-25	0952
	EPITNE	9-5-25	1230		EPITNE	9/5/25	1230

COC Analyst Cooler Review: Initials: [illegible] Date: 9/5/25

Supervisor Review: Initials: [illegible] Date: 9-2-25

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-195404-1
SDG Number: 250902010

Login Number: 195404
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251006011 **Sample Date:** 10/5/2025

Sample ID Number: 251006011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	tbradley2	10/15/2025	2100.47	mg/Dry Kg	197	S	MS recovered low. MSD and RPD passed.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	tbradley2	10/15/2025	726.76	mg/Wet Kg	68.2	S	MS recovered low. MSD and RPD passed.
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	10/14/2025	25000	mg/kg dry	21000		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	10/9/2025	21	mg/kg dry	6.9		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	10/8/2025	15	mg/kg dry	2.8		
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	10/9/2025	19	mg/kg dry	6.9		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	10/8/2025	36	%	0.50		
Metals								
Aluminum	Contract Lab	EurofinsLancaster	10/13/2025	8300	mg/kg dry	39		
Arsenic	Contract Lab	EurofinsLancaster	10/13/2025	6.2	mg/kg dry	0.79		
Cadmium	Contract Lab	EurofinsLancaster	10/13/2025	0.81	mg/kg dry	0.20		
Calcium	Contact Lab	EurofinsLancaster	10/13/2025	150000	mg/kg dry	390		
Chromium	Contract Lab	EurofinsLancaster	10/13/2025	33	mg/kg dry	0.79		
Copper	Contract Lab	EurofinsLancaster	10/13/2025	240	mg/kg dry	0.79		

Printed Date
Tuesday, October 28, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251006011 **Sample Date:** 10/5/2025

Sample ID Number: 251006011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Iron	Contract Lab	EurofinsLancaster	10/13/2025	35000	mg/kg dry	39		
Lead	Contract Lab	EurofinsLancaster	10/13/2025	33	mg/kg dry	0.39		
Mercury, Total	Contract Lab	EurofinsLancaster	10/20/2025	0.40	mg/kg dry	0.17		Sample was sent out at a later date for Mercury resulting in an out of hold total Solids result. Total Solid on the Mercury sample = 33% and was used in the mercury dry weight calculation. See attached report for details.
Molybdenum	Contract Lab	EurofinsLancaster	10/13/2025	9.8	mg/kg dry	0.39		
Nickel	Contract Lab	EurofinsLancaster	10/13/2025	23	mg/kg dry	0.79		
Phosphorus, Total	~~EPA6010C~~ Contract Lab RH 10-28-25	RJLeeGroup	10/8/2025	8510	mg/kg	46.9		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	10/13/2025	1700	mg/kg dry	79		
Selenium	Contract Lab	EurofinsLancaster	10/13/2025	3.6	mg/kg dry	0.79		
Zinc	Contract Lab	EurofinsLancaster	10/13/2025	530	mg/kg dry	59		

Printed Date
Tuesday, October 28, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251006011 **Sample Date:** 10/5/2025

Sample ID Number: 251006011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
S	Matrix spike % recovery outside acceptable range

Comments:

sample comp oct 6- from grabs collected oct 1, oct 2 , oct 5

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hoover

10-28-25

Date

Printed Date
Tuesday, October 28, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251006011 **Sample Date:** 10/5/2025

Sample ID Number: 251006011-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	SM 2540G - 2015	snixon	10/7/2025	34.6	%			

Data Qualifier **Data Qualifier Description**

Comments:

sample comp oct 6- from grabs collected oct 1, oct 2 , oct 5

Released by:

Larissa Hoover

10-28-25

Date

Printed Date
Tuesday, October 28, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 10/20/2025 12:20:18 PM

JOB DESCRIPTION

Limed Sludge Monthly
251006011

JOB NUMBER

180-197027-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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10/20/2025 12:20:18 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 12
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 17

Job Narrative
180-197027-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 10/10/2025 12:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 1.0°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540G: The following sample was analyzed outside of analytical holding time due to insufficient time remaining to analyze sample within holding time: 251006011-01 (180-197027-1).
Sample received Friday afternoon; last day of hold was Sunday. The client was contacted and instructed the lab to proceed with analysis.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Qualifiers

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-197027-1	251006011-01	Solid	10/05/25 20:09	10/10/25 12:50	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Method	Method Description	Protocol	Laboratory
7471B	Mercury (CVAA)	SW846	ELLE
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
7471B	Preparation, Mercury	SW846	ELLE

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW646 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Client Sample ID: 251006011-01
Date Collected: 10/05/25 20:09
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197027-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			504468	10/13/25 17:36	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251006011-01
Date Collected: 10/05/25 20:09
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197027-1
Matrix: Solid
Percent Solids: 33.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.63 g	100 mL	715087	10/17/25 10:30	HNC4	ELLE
Total/NA	Analysis	7471B		1			716685	10/20/25 09:23	X3ZX	ELLE
	Instrument ID: M10 – 31820									

Laboratory References:
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst Referances:
Lab: EET PIT
Batch Type: Analysis
ELS = Edwin Shireman
Lab: ELLE
Batch Type: Prep
HNC4 = Mindy Schantzenbach
Batch Type: Analysis
X3ZX = Skyler Ruf

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Client Sample ID: 251006011-01
Date Collected: 10/05/25 20:09
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197027-1
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	33	H	0.50		%			10/13/25 17:36	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Client Sample ID: 251006011-01
Date Collected: 10/05/25 20:09
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197027-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.40		0.17		mg/Kg	☼	10/17/25 10:30	10/20/25 09:23	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-715087/1-A
Matrix: Solid
Analysis Batch: 716665

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715087

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		10/17/25 10:30	10/20/25 08:47	1

Lab Sample ID: LCS 410-715087/2-A
Matrix: Solid
Analysis Batch: 716665

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715087

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.152		mg/Kg		91	80 - 120

Lab Sample ID: 410-246647-A-1-D MS
Matrix: Solid
Analysis Batch: 716665

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 715087

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.194	0.224		mg/Kg	☼	97	80 - 120

Lab Sample ID: 410-246647-A-1-E MSD
Matrix: Solid
Analysis Batch: 716665

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 715087

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.185	0.191		mg/Kg	☼	84	80 - 120	16	20

Lab Sample ID: 410-246647-A-1-C DU
Matrix: Solid
Analysis Batch: 716665

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 715087

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-197031-F-1 DU
Matrix: Solid
Analysis Batch: 504468

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	33		34.1		%		3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-197027-1
SDG: 251006011

Metals

Prep Batch: 715087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197027-1	251006011-01	Total/NA	Solid	7471B	
MB 410-715087/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-715087/2-A	Lab Control Sample	Total/NA	Solid	7471B	
410-246647-A-1-D MS	Matrix Spike	Total/NA	Solid	7471B	
410-246647-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
410-246647-A-1-C DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 716665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197027-1	251006011-01	Total/NA	Solid	7471B	715087
MB 410-715087/1-A	Method Blank	Total/NA	Solid	7471B	715087
LCS 410-715087/2-A	Lab Control Sample	Total/NA	Solid	7471B	715087
410-246647-A-1-D MS	Matrix Spike	Total/NA	Solid	7471B	715087
410-246647-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	715087
410-246647-A-1-C DU	Duplicate	Total/NA	Solid	7471B	715087

General Chemistry

Analysis Batch: 504468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197027-1	251006011-01	Total/NA	Solid	SM 2540G	
180-197031-F-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251006011**

Additional Information : Limed Sludge Monthly

Sample composited on 10/6 - grabs 10/1,10/2,10/5

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: Mercury					
							Number of Containers					
251006011-01	10/5/25	2009	S	N	C	5 DAY TURN AROUND	1					

180-197027 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	10/10/25	0950	[signature]	Eurofins Pgh	10-10-25	0950
[signature]	EPITME	10-10-25	1250	[signature]	EPITME	10/10/25	1250
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required

COC Analyst Cooler Review: Initials: [illegible] Date: 10/10/25

Supervisor Review: Initials: [illegible] Date: 10-9-25

Alcosan #25 +0.1

J1	0.8	0.9
J2	0.9	1.0

180-197027 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shall	Carrier Tracking No(s): N/A	COC No: 180-546774.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shall.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-197027-1
Address: 2425 New Holland Pike,	Due Date Requested: 10/20/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Limed Sludge Monthly	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7471B/7471B_PrepMercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
251006011-01 (180-197027-1)	10/5/25	20:09 Eastern	G	Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
James J. Kinkelman	10/13/25 13:00	EPHNF	MEA	10/13/25 1400	EIE
MEA	10/13/25 1845	EIE			
			[signature]	10/13/25 1845	[signature]

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R:6.1 C:6.0

Ver: 10/10/2024

10/20/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-197027-1
SDG Number: 251006011

Login Number: 197027
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-197027-1
SDG Number: 251006011

Login Number: 197027
List Number: 2
Creator: Williams, Aeric

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/14/25 09:22 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 10/15/2025 6:57:54 AM

JOB DESCRIPTION

Limed Sludge Monthly 10/1, 10/2, 10/5
251006011

JOB NUMBER

180-196802-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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10/15/2025 6:57:54 AM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 15
Chain of Custody 17
Receipt Checklists 19

Job Narrative
180-196802-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 10/7/2025 11:35 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: The following sample was diluted due to the nature of the sample matrix: 251006011-01 (180-196802-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F3	Duplicate RPD exceeds the control limit
FH	MS and/or MSD recovery above control limits.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-196802-1	251006011-01	Solid	10/05/25 20:09	10/07/25 11:35	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

Client Sample ID: 251006011-01 **Lab Sample ID: 180-196802-1**
Date Collected: 10/05/25 20:09 **Matrix: Solid**
Date Received: 10/07/25 11:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			504249	10/08/25 17:31	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251006011-01 **Lab Sample ID: 180-196802-1**
Date Collected: 10/05/25 20:09 **Matrix: Solid**
Date Received: 10/07/25 11:35 **Percent Solids: 36.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.0210 g	50 mL	504215	10/08/25 10:18	ERP	EET PIT
Soluble	Analysis	EPA 9056A		5	1 mL	1 mL	504192	10/09/25 02:44	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3050B			1.41 g	100 mL	712781	10/12/25 21:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			713403	10/13/25 16:03	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	3050B			1.41 g	100 mL	712781	10/12/25 21:00	UAMX	ELLE
Total/NA	Analysis	6020B		10			713403	10/13/25 16:14	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	351.2			0.27 g	25 mL	712085	10/13/25 12:00	NLE3	ELLE
Total/NA	Analysis	351.2		50			713766	10/14/25 12:42	JCG7	ELLE
	Instrument ID: 5791									
Soluble	Leach	DI Leach			4.98 g	50.0 mL	504213	10/08/25 09:25	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			504224	10/08/25 11:22	RSK	EET PIT
	Instrument ID: ASTORIA2									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - ERP = Evan Papak
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Prep
  - NLE3 = Thomas Schmertz
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - JCG7 = Elena Hess
  - LHF4 = Diamond Boyer

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

Client Sample ID: 251006011-01
Date Collected: 10/05/25 20:09
Date Received: 10/07/25 11:35

Lab Sample ID: 180-196802-1
Matrix: Solid
Percent Solids: 36.0

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	19		6.9		mg/Kg	☼		10/09/25 02:44	5
Nitrate as N	21		6.9		mg/Kg	☼		10/09/25 02:44	5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8300		39		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Arsenic	6.2		0.79		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Cadmium	0.81		0.20		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Calcium	150000		390		mg/Kg	☼	10/12/25 21:00	10/13/25 16:14	10
Chromium	33		0.79		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Copper	240		0.79		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Iron	35000		39		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Lead	33		0.39		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Molybdenum	9.8		0.39		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Nickel	23		0.79		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Potassium	1700		79		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Selenium	3.6		0.79		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2
Zinc	530		59		mg/Kg	☼	10/12/25 21:00	10/13/25 16:03	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	25000		21000		mg/Kg	☼	10/13/25 12:00	10/14/25 12:42	50
Total Solids (SM 2540G)	36		0.50		%			10/08/25 17:31	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	15		2.8		mg/Kg	☼		10/08/25 11:22	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-504215/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 504192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			10/08/25 23:50	1
Nitrate as N	ND		0.50		mg/Kg			10/08/25 23:50	1

Lab Sample ID: LCS 180-504215/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 504192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	11.8		mg/Kg		95	80 - 120
Nitrate as N	12.5	12.3		mg/Kg		98	80 - 120

Lab Sample ID: 180-196614-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 504192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		13.2	13.5		mg/Kg	☼	103	80 - 120
Nitrate as N	6.6		13.2	20.3		mg/Kg	☼	104	80 - 120

Lab Sample ID: 180-196614-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 504192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		13.2	13.6		mg/Kg	☼	103	80 - 120	1	15
Nitrate as N	6.6		13.2	20.8		mg/Kg	☼	108	80 - 120	3	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-712781/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 713403 — **Prep Batch: 712781**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		20		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Arsenic	ND		0.40		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Cadmium	ND		0.10		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Calcium	ND		40		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Chromium	ND		0.40		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Copper	ND		0.40		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Iron	ND		20		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Lead	ND		0.20		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Molybdenum	ND		0.20		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Nickel	ND		0.40		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Potassium	ND		40		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Selenium	ND		0.40		mg/Kg		10/12/25 21:00	10/13/25 15:24	2
Zinc	ND		30		mg/Kg		10/12/25 21:00	10/13/25 15:24	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-712781/2-A
Matrix: Solid
Analysis Batch: 713403

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 712781

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	500	494		mg/Kg		99	82 - 119
Arsenic	50.0	48.3		mg/Kg		97	84 - 114
Cadmium	5.00	5.10		mg/Kg		102	85 - 117
Calcium	500	496		mg/Kg		99	81 - 119
Chromium	50.0	48.8		mg/Kg		98	83 - 116
Copper	50.0	48.3		mg/Kg		97	83 - 115
Iron	500	498		mg/Kg		100	84 - 118
Lead	5.00	5.11		mg/Kg		102	85 - 119
Molybdenum	5.00	5.00		mg/Kg		100	83 - 119
Nickel	50.0	48.4		mg/Kg		97	84 - 116
Potassium	500	490		mg/Kg		98	83 - 118
Selenium	10.0	9.68		mg/Kg		97	83 - 115
Zinc	50.0	48.9		mg/Kg		98	84 - 116

Lab Sample ID: 410-246466-B-3-C MS
Matrix: Solid
Analysis Batch: 713403

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 712781

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	5.2		56.1	62.8		mg/Kg	☼	103	75 - 125
Cadmium	0.71		5.61	6.85		mg/Kg	☼	109	75 - 125
Calcium	760	FH	561	1540	FH	mg/Kg	☼	138	75 - 125
Chromium	26		58.1	87.9		mg/Kg	☼	110	75 - 125
Copper	37		56.1	96.8		mg/Kg	☼	106	75 - 125
Lead	280	4	5.61	285	4	mg/Kg	☼	136	75 - 125
Molybdenum	0.73		5.61	6.62		mg/Kg	☼	105	75 - 125
Nickel	19		56.1	80.7		mg/Kg	☼	109	75 - 125
Selenium	0.67		11.2	12.3		mg/Kg	☼	104	75 - 125
Zinc	350	4	56.1	403	4	mg/Kg	☼	92	75 - 125

Lab Sample ID: 410-246466-B-3-D MSD
Matrix: Solid
Analysis Batch: 713403

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 712781

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	5.2		53.8	82.7		mg/Kg	☼	107	75 - 125	0	20
Cadmium	0.71		5.38	6.58		mg/Kg	☼	109	75 - 125	4	20
Calcium	760	FH	538	1640	FH	mg/Kg	☼	145	75 - 125	0	20
Chromium	26		53.8	88.4		mg/Kg	☼	116	75 - 125	1	20
Copper	37		53.8	95.5		mg/Kg	☼	108	75 - 125	1	20
Lead	280	4	5.38	277	4	mg/Kg	☼	2	75 - 125	3	20
Molybdenum	0.73		5.38	6.55		mg/Kg	☼	108	75 - 125	1	20
Nickel	19		53.8	78.6		mg/Kg	☼	110	75 - 125	3	20
Selenium	0.67		10.8	12.4		mg/Kg	☼	109	75 - 125	0	20
Zinc	350	4	53.8	370	4	mg/Kg	☼	35	75 - 125	9	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-246466-B-3-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 713403 — **Prep Batch: 712781**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	5.2		5.81		mg/Kg	☼	10	20
Cadmium	0.71		0.866		mg/Kg	☼	19	20
Calcium	780	FH	807		mg/Kg	☼	6	20
Chromium	26		31.7		mg/Kg	☼	19	20
Copper	37		42.3		mg/Kg	☼	12	20
Lead	280	4	347	F3	mg/Kg	☼	22	20
Molybdenum	0.73		0.850		mg/Kg	☼	16	20
Nickel	19		22.7		mg/Kg	☼	15	20
Potassium	1800	^5- FH	2110		mg/Kg	☼	14	20
Selenium	0.67		0.690		mg/Kg	☼	2	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: 620-30046-C-1-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 713766 — **Prep Batch: 712065**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	47000		1570	48200	4	mg/Kg	☼	85	70 - 130

Lab Sample ID: 620-30046-C-1-E DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 713766 — **Prep Batch: 712065**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	47000		42600		mg/Kg	☼	9	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-504213/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 504224

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			10/08/25 11:14	1

Lab Sample ID: LCS 180-504213/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 504224

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	19.0		mg/Kg		95	90 - 110

Lab Sample ID: 180-196802-1 MS — **Client Sample ID: 251006011-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 504224

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	15		55.7	68.7		mg/Kg	☼	97	90 - 110

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 180-196802-1 MSD
Matrix: Solid
Analysis Batch: 504224

Client Sample ID: 251006011-01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	15		55.8	67.5		mg/Kg	☼	94	90 - 110	2	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-196802-1 DU
Matrix: Solid
Analysis Batch: 504249

Client Sample ID: 251006011-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	36			35.0		%				3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

HPLC/IC

Analysis Batch: 504192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Soluble	Solid	EPA 9056A	504215
MB 180-504215/1-A	Method Blank	Soluble	Solid	EPA 9056A	504215
LCS 180-504215/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	504215
180-196614-A-1-B MS	Matrix Spike	Soluble	Solid	EPA 9056A	504215
180-196614-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	504215

Leach Batch: 504215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Soluble	Solid	DI Leach	
MB 180-504215/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-504215/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-196614-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
180-196614-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Metals

Prep Batch: 712781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Total/NA	Solid	3050B	
MB 410-712781/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-712781/2-A	Lab Control Sample	Total/NA	Solid	3050B	
410-246466-B-3-C MS	Matrix Spike	Total/NA	Solid	3050B	
410-246466-B-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-246466-B-3-B DU	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 713403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Total/NA	Solid	6020B	712781
180-196802-1	251006011-01	Total/NA	Solid	6020B	712781
MB 410-712781/1-A	Method Blank	Total/NA	Solid	6020B	712781
LCS 410-712781/2-A	Lab Control Sample	Total/NA	Solid	6020B	712781
410-246466-B-3-C MS	Matrix Spike	Total/NA	Solid	6020B	712781
410-246466-B-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	6020B	712781
410-246466-B-3-B DU	Duplicate	Total/NA	Solid	6020B	712781

General Chemistry

Leach Batch: 504213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Soluble	Solid	DI Leach	
MB 180-504213/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-504213/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-196802-1 MS	251006011-01	Soluble	Solid	DI Leach	
180-196802-1 MSD	251006011-01	Soluble	Solid	DI Leach	

Analysis Batch: 504224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Soluble	Solid	EPA 353.2	504213
MB 180-504213/1-A	Method Blank	Soluble	Solid	EPA 353.2	504213
LCS 180-504213/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	504213
180-196802-1 MS	251006011-01	Soluble	Solid	EPA 353.2	504213
180-196802-1 MSD	251006011-01	Soluble	Solid	EPA 353.2	504213

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly 10/1, 10/2, 10/5

Job ID: 180-196802-1
SDG: 251006011

General Chemistry

Analysis Batch: 504249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Total/NA	Solid	SM 2540G	
180-196802-1 DU	251006011-01	Total/NA	Solid	SM 2540G	

Prep Batch: 712065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Total/NA	Solid	351.2	
620-30046-C-1-F MS	Matrix Spike	Total/NA	Solid	351.2	
620-30046-C-1-E DU	Duplicate	Total/NA	Solid	351.2	

Analysis Batch: 713766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196802-1	251006011-01	Total/NA	Solid	351.2	712065
620-30046-C-1-F MS	Matrix Spike	Total/NA	Solid	351.2	712065
620-30046-C-1-E DU	Duplicate	Total/NA	Solid	351.2	712065

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251006011**

Additional Information : Limed Sludge Monthly

Sample composited on 10/6 - grabs 10/1,10/2,10/5

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn, Al, Fe		J5 #25	1.4 to.1 1.5
							Number of Containers					
251006011-01	10/5/25	2009	S	N	C	5 DAY TURN AROUND	1	1	1			

180-196802 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	10/7/25	1000		Eurofins Pgh	10-7-25	1000
	EPITINE	10-7-25	11:35		EPITINE	10/7/25	1135

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required

COC Analyst Cooler Review: Initials: TH Date: 10/7/25 Supervisor Review: Initials: Date:

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shell	Carrier Tracking No(s): N/A	COC No: 180-546515.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shall.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-196802-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 10/15/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Limed Sludge Monthly 10/1, 10/2, 10/5	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351,2/351.2_PrepNitrogen, Total Kjeldahl	6020B/3050B(MOD) PPL Metals by ICP/MS 60209	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
251006011-01 (180-196802-1)	10/5/25	20:09 Eastern	G	Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 10/8/25 1330	Company: EZLE	Received by:	Date/Time: 10-8-25 14:50	Company: EZLE
Relinquished by:	Date/Time: 10-8-25 20:05	Company: EZLE	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 10/8/25 2005	Company:
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: R: 3.8 C: 3.7		

AW

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-196802-1
SDG Number: 251006011

Login Number: 196802
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-196802-1
SDG Number: 251006011

Login Number: 196802
List Number: 2
Creator: Williams, Aeric

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/09/25 09:38 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers ere used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA071020250034
Samples Received: October 7, 2025
Report Date: October 14, 2025
Client Project: 251006011
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
251006011-01	PA071020250034-001	10/05/2025, 08:09 PM	Phosphorus	0.851	8510	0.00469	46.9	10/08/2025	P

Comments: Results on a dried weight basis

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)
A: AIHA LAP, LLC Accredited (Lab ID 100364)

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

--- : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accreditations

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251001009 **Sample Date:** 10/1/2025

Sample ID Number: 251001009-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	10/3/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	10/2/2025	33	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

PCBs and solids Eurofins Pgh

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

Larissa Hoover

11-6-25

Date

Printed Date

Thursday, November 6, 2025

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1

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 10/6/2025 12:03:00 PM

JOB DESCRIPTION

Limed Sludge Monthly
251001009

JOB NUMBER

180-196585-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 15

Job Narrative
180-196585-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 10/1/2025 1:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0°C and 1.9°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

PCBs
Method 8082A: 6215174
The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 251001009-01 (180-196585-1), (LCS 180-503906/2-A), (MB 180-503906/1-A), (180-196550-A-2-C), (180-196550-A-2-A MS) and (180-196550-A-2-B MSD).

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 251001009-01 (180-196585-1), (LCS 180-503906/2-A), (MB 180-503906/1-A), (180-196550-A-2-C), (180-196550-A-2-A MS) and (180-196550-A-2-B MSD).6239381
6513163

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-196585-1
SDG: 251001009

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-196585-1
SDG: 251001009

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

5

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-196585-1
SDG: 251001009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-196585-1	251001009-01	Solid	10/01/25 06:05	10/01/25 13:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-196585-1
SDG: 251001009

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-196585-1
SDG: 251001009

Client Sample ID: 251001009-01 — **Lab Sample ID: 180-196585-1**
Date Collected: 10/01/25 06:05 — **Matrix: Solid**
Date Received: 10/01/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			503953	10/02/25 17:00	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251001009-01 — **Lab Sample ID: 180-196585-1**
Date Collected: 10/01/25 06:05 — **Matrix: Solid**
Date Received: 10/01/25 13:30 — **Percent Solids: 33.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.2 g	20.0 mL	503906	10/02/25 05:42	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	503968	10/03/25 18:18	JMO	EET PIT
	Instrument ID: CHGC20									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

MKK = Mary Kenny

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-196585-1
SDG: 251001009

Client Sample ID: 251001009-01
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196585-1
Matrix: Solid
Percent Solids: 33.0

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg	☼	10/02/25 05:42	10/03/25 18:18	1
PCB-1221	ND		50		ug/Kg	☼	10/02/25 05:42	10/03/25 18:18	1
PCB-1232	ND		50		ug/Kg	☼	10/02/25 05:42	10/03/25 18:18	1
PCB-1242	ND		50		ug/Kg	☼	10/02/25 05:42	10/03/25 18:18	1
PCB-1248	ND		50		ug/Kg	☼	10/02/25 05:42	10/03/25 18:18	1
PCB-1254	ND		50		ug/Kg	☼	10/02/25 05:42	10/03/25 18:18	1
PCB-1260	ND		50		ug/Kg	☼	10/02/25 05:42	10/03/25 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*83*		*17 - 144*	*10/02/25 05:42*	*10/03/25 18:18*	*1*
Tetrachloro-m-xylene (Surr)	*86*		*17 - 144*	*10/02/25 05:42*	*10/03/25 18:18*	*1*
DCB Decechlorobiphenyl (Surr)	*93*		*26 - 142*	*10/02/25 05:42*	*10/03/25 18:18*	*1*
DCB Decachlorobiphenyl (Surr)	*87*		*26 - 142*	*10/02/25 05:42*	*10/03/25 18:18*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**33**		0.50		%			10/02/25 17:00	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-196585-1
SDG: 251001009

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-503906/1-A
Matrix: Solid
Analysis Batch: 503968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 503906

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		10/02/25 05:42	10/03/25 16:49	1
PCB-1221	ND		17		ug/Kg		10/02/25 05:42	10/03/25 16:49	1
PCB-1232	ND		17		ug/Kg		10/02/25 05:42	10/03/25 16:49	1
PCB-1242	ND		17		ug/Kg		10/02/25 05:42	10/03/25 16:49	1
PCB-1248	ND		17		ug/Kg		10/02/25 05:42	10/03/25 16:49	1
PCB-1254	ND		17		ug/Kg		10/02/25 05:42	10/03/25 16:49	1
PCB-1260	ND		17		ug/Kg		10/02/25 05:42	10/03/25 16:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*88*		*17 - 144*	*10/02/25 05:42*	*10/03/25 16:49*	*1*
Tetrachloro-m-xylene (Surr)	*98*		*17 - 144*	*10/02/25 05:42*	*10/03/25 16:49*	*1*
DCB Decachlorobiphenyl (Surr)	*99*		*26 - 142*	*10/02/25 05:42*	*10/03/25 16:49*	*1*
DCB Decachlorobiphenyl (Surr)	*92*		*26 - 142*	*10/02/25 05:42*	*10/03/25 16:49*	*1*

Lab Sample ID: LCS 180-503906/2-A
Matrix: Solid
Analysis Batch: 503968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 503906

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1330		ug/Kg		100	53 - 115
PCB-1260	1330	1350		ug/Kg		101	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*93*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*101*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*90*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*93*		*26 - 142*

Lab Sample ID: 180-196550-A-2-A MS
Matrix: Solid
Analysis Batch: 503968

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 503906

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		1420	1190		ug/Kg	☼	84	53 - 115
PCB-1260	ND		1420	1320		ug/Kg	☼	93	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*75*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*84*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*80*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*81*		*26 - 142*

Lab Sample ID: 180-196550-A-2-B MSD
Matrix: Solid
Analysis Batch: 503968

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 503906

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1440	1370		ug/Kg	☼	95	53 - 115	14	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-196550-A-2-B MSD
Matrix: Solid
Analysis Batch: 503968

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 503906

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		1440	1420		ug/Kg	☼	99	45 - 108	7	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*88*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*98*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*91*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*94*		*26 - 142*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-196585-1 DU
Matrix: Solid
Analysis Batch: 503953

Client Sample ID: 251001009-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	33		31.5		%		5	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-196585-1
SDG: 251001009

GC Semi VOA

Prep Batch: 503906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196585-1	251001009-01	Total/NA	Solid	3541	
MB 180-503906/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-503906/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-196550-A-2-A MS	Matrix Spike	Total/NA	Solid	3541	
180-196550-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 503968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196585-1	251001009-01	Total/NA	Solid	EPA 8082A	503906
MB 180-503906/1-A	Method Blank	Total/NA	Solid	EPA 8082A	503905
LCS 180-503906/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	503906
180-196550-A-2-A MS	Matrix Spike	Total/NA	Solid	EPA 8082A	503906
180-196550-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	503906

General Chemistry

Analysis Batch: 503953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196585-1	251001009-01	Total/NA	Solid	SM 2540G	
180-196585-1 DU	251001009-01	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251001009**

Additional Information : Limed Sludge Monthly

Tests to be Performed: Total Solids, PCB

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers					
251001009-01	10/1/25	0605	S	N	G	** 5 day rush**	1					

180-196585 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	10.01.25	1251		Eurofins Pgh	10-1-25	1251
	EPTNE	10-1-25	1330		EPTNE	10/1/25	1330

COC Analyst Cooler Review: Initials: TH Date: 10/1/25

Supervisor Review: Initials: [illegible] Date: 10-1-25

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-196585-1
SDG Number: 251001009

Login Number: 196585
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251106010 **Sample Date:** 11/5/2025

Sample ID Number: 251106010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	jsabo	11/14/2025	2690	mg/Dry Kg	38.5	S	MS recovered below QC acceptance limits. The MSD and RPD passed. Matrix spikes indicated the sample matrix is not homogenous.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	jsabo	11/14/2025	913	mg/Wet Kg	13	S	MS recovered below QC acceptance limits. The MSD and RPD passed. Matrix spikes indicated the sample matrix is not homogenous.
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	11/18/2025	9100	mg/Dry Kg	2300		
Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	11/12/2025	14	mg/kg dry	3.7		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	11/11/2025	9.7	mg/kg dry	3.0	FL	MS and/or MSD recovery below control limits.
Nitrite-Nitrogen	Contract Lab	EurofinsPittsburgh	11/12/2025	14	mg/kg dry	3.7		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	11/10/2025	34	%	0.50		
Metals								
Aluminum	Contract Lab	EurofinsLancaster	11/17/2025	7600	mg/kg dry	57		

Printed Date
Thursday, December 4, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251106010 **Sample Date:** 11/5/2025

Sample ID Number: 251106010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Arsenic	Contract Lab	EurofinsLancaster	11/17/2025	6.5	mg/kg dry	1.1		
Cadmium	Contract Lab	EurofinsLancaster	11/17/2025	0.90	mg/kg dry	0.29		
Calcium	Contact Lab	EurofinsLancaster	11/17/2025	99000	mg/kg dry	110		
Chromium	Contract Lab	EurofinsLancaster	11/17/2025	36	mg/kg dry	1.1		
Copper	Contract Lab	EurofinsLancaster	11/17/2025	250	mg/kg dry	1.1		
Iron	Contract Lab	EurofinsLancaster	11/17/2025	37000	mg/kg dry	57		
Lead	Contract Lab	EurofinsLancaster	11/17/2025	38	mg/kg dry	0.57		
Mercury, Total	EPA 7471B	jweaver	11/17/2025	0.35	mg/Dry Kg	0.17		
Molybdenum	Contract Lab	EurofinsLancaster	11/17/2025	12	mg/kg dry	0.57	B	Analyte was found in the blank.
Nickel	Contract Lab	EurofinsLancaster	11/17/2025	22	mg/kg dry	1.1		
Phosphorus, Total	~~EPA6010C~~ Contract Lab UH 12-4-25	RJLeeGroup	11/10/2025	7460	mg/kg	45.2		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	11/17/2025	2100	mg/kg dry	110		
Selenium	Contract Lab	EurofinsLancaster	11/17/2025	3.9	mg/kg dry	1.1		
Zinc	Contract Lab	EurofinsLancaster	11/17/2025	470	mg/kg dry	86		

Printed Date
Thursday, December 4, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251106010 **Sample Date:** 11/5/2025

Sample ID Number: 251106010-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
B	Similar concentration found in field/method blank
S	Matrix spike % recovery outside acceptable range

Comments:

samples comp nov 6- from samples collected nov 2, nov 4, nov 5

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hoover

12-4-25

Date

Printed Date
Thursday, December 4, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251106010 **Sample Date:** 11/5/2025

Sample ID Number: 251106010-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	SM 2540G - 2015	snixon	11/6/2025	33.9	%			

Data Qualifier **Data Qualifier Description**

Comments:

samples comp nov 6- from samples collected nov 2, nov 4, nov 5

Released by:

Larissa Hoover

12-4-25

Date

Printed Date
Thursday, December 4, 2025

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-8023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA071120250005
Samples Received: November 7, 2025
Report Date: November 14, 2025
Client Project: 251106010
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
251106010-01	PA071120250005-001	11/05/2025, 08:00 PM	Phosphorus	0.746	7460	0.00452	45.2	11/10/2025	P

Comments: Results on a dried weight basis

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00398, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10884)

A: AIHA LAP, LLC Accredited (Lab ID 100364)
-- : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accreditations

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

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Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 11/18/2025 2:12:58 PM

JOB DESCRIPTION

Limed Sludge Monthly
251106010

JOB NUMBER

180-198247-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 15
Chain of Custody 17
Receipt Checklists 20

Job Narrative
180-198247-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 11/7/2025 1:00 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
Method 9056A_ORGFM_48H - Soluble: The following sample was diluted due to the nature of the sample matrix: 251106010-01 (180-198247-1). Elevated reporting limits (RLs) are provided.

Method 9056A_ORGFM_48H - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-506079 and analytical batch 180-506165 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 9056A_ORGFM_48H - Soluble: The following samples were diluted due to the nature of the sample matrix: (180-198164-B-1-A), (180-198164-B-1-B MS) and (180-198164-B-1-C MSD). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 353.2 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-506069 and analytical batch 180-506193 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
FH	MS and/or MSD recovery above control limits.

Metals

Qualifier	Qualifier Description
B	Analyte was found in the blank.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-198247-1	251106010-01	Solid	11/05/25 20:00	11/07/25 13:00	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Method	Method Description	Protocol	Laboratory
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Client Sample ID: 251106010-01 — **Lab Sample ID: 180-198247-1**
Date Collected: 11/05/25 20:00 — **Matrix: Solid**
Date Received: 11/07/25 13:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			506061	11/10/25 10:04	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251106010-01 — **Lab Sample ID: 180-198247-1**
Date Collected: 11/05/25 20:00 — **Matrix: Solid**
Date Received: 11/07/25 13:00 — **Percent Solids: 33.5**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.0643 g	50 mL	506079	11/10/25 13:12	ERP	EET PIT
Soluble	Analysis	EPA 9056A		2.5	1 mL	1 mL	506237	11/12/25 13:46	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Prep	3050B			1.04 g	100 mL	730108	11/16/25 21:30	UAMX	ELLE
Total/NA	Analysis	6020B		2			731015	11/17/25 11:08	F7JF	ELLE
	Instrument ID: E07 - 27813									
Total/NA	Prep	3050B			1.04 g	100 mL	730108	11/16/25 21:30	UAMX	ELLE
Total/NA	Analysis	6020B		2			731012	11/17/25 10:08	F7JF	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	351.2			1.04 g	25 mL	730790	11/17/25 10:35	NLE3	ELLE
Total/NA	Analysis	351.2		20			731639	11/18/25 12:42	JCG7	ELLE
	Instrument ID: 25924									
Soluble	Leach	DI Leach			5.02 g	50.0 mL	506069	11/11/25 06:30	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			506193	11/11/25 13:25	RSK	EET PIT
	Instrument ID: ASTORIA2									

[1] This procedure uses a method stipulated length of time for the process. Both start and and times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - ERP = Evan Papak
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Prep
  - NLE3 = Thomas Schmertz
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - F7JF = Dennis Dick
  - JCG7 = Elena Hess

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Client Sample ID: 251106010-01
Date Collected: 11/05/25 20:00
Date Received: 11/07/25 13:00

Lab Sample ID: 180-198247-1
Matrix: Solid
Percent Solids: 33.5

Method: SW846 EPA 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	14		3.7		mg/Kg	☼		11/12/25 13:46	2.5
Nitrate as N	14		3.7		mg/Kg	☼		11/12/25 13:46	2.5

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.5		1.1		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Cadmium	0.90		0.29		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Calcium	99000		110		mg/Kg	☼	11/16/25 21:30	11/17/25 11:08	2
Chromium	36		1.1		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Copper	250		1.1		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Lead	38		0.57		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Molybdenum	12	B	0.57		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Nickel	22		1.1		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Potassium	2100		110		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Selenium	3.9		1.1		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Zinc	470		86		mg/Kg	☼	11/16/25 21:30	11/17/25 11:08	2
Iron	37000		57		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2
Aluminum	7600		57		mg/Kg	☼	11/16/25 21:30	11/17/25 10:08	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	9100		2300		mg/Kg	☼	11/17/25 10:35	11/18/25 12:42	20
Total Solids (SM 2540G)	34		0.50		%			11/10/25 10:04	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	9.7	FL	3.0		mg/Kg	☼		11/11/25 13:25	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-506079/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506165

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			11/12/25 05:11	1
Nitrate as N	ND		0.50		mg/Kg			11/12/25 05:11	1

Lab Sample ID: LCS 180-506079/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506165

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	11.4		mg/Kg		92	80 - 120
Nitrate as N	12.5	11.7		mg/Kg		93	80 - 120

Lab Sample ID: 180-198164-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506165

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND	FH	16.9	25.3	FH	mg/Kg	☼	150	80 - 120
Nitrate as N	ND		16.9	16.6		mg/Kg	☼	99	80 - 120

Lab Sample ID: 180-198164-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506165

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND	FH	16.9	25.6	FH	mg/Kg	☼	152	80 - 120	1	15
Nitrate as N	ND		16.9	17.0		mg/Kg	☼	101	80 - 120	2	15

Lab Sample ID: MB 180-506079/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.50		mg/Kg			11/12/25 11:06	1
Nitrate as N	ND		0.50		mg/Kg			11/12/25 11:06	1

Lab Sample ID: LCS 180-506079/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	12.5	11.7		mg/Kg		93	80 - 120
Nitrate as N	12.5	11.6		mg/Kg		93	80 - 120

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-730108/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 731012 — **Prep Batch: 730108**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Cadmium	ND		0.10		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Calcium	ND		40		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Chromium	ND		0.40		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Copper	ND		0.40		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Lead	ND		0.20		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Molybdenum	0.290	B	0.20		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Nickel	ND		0.40		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Potassium	ND		40		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Selenium	ND		0.40		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Zinc	ND		30		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Iron	ND		20		mg/Kg		11/16/25 21:30	11/17/25 09:11	2
Aluminum	ND		20		mg/Kg		11/16/25 21:30	11/17/25 09:11	2

Lab Sample ID: LCS 410-730108/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 731012 — **Prep Batch: 730108**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	51.3		mg/Kg		103	84 - 114
Cadmium	5.00	5.26		mg/Kg		105	85 - 117
Calcium	500	575		mg/Kg		115	81 - 119
Chromium	50.0	52.7		mg/Kg		105	83 - 116
Copper	50.0	51.3		mg/Kg		103	83 - 115
Lead	5.00	5.26		mg/Kg		105	85 - 119
Molybdenum	5.00	5.52		mg/Kg		110	83 - 119
Nickel	50.0	53.3		mg/Kg		107	84 - 116
Potassium	500	543		mg/Kg		109	83 - 118
Selenium	10.0	10.4		mg/Kg		104	83 - 115
Iron	500	525		mg/Kg		105	84 - 118
Aluminum	500	524		mg/Kg		105	82 - 119

Lab Sample ID: LCS 410-730108/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 731015 — **Prep Batch: 730108**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	50.0	55.1		mg/Kg		110	84 - 116

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-730790/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 731639 — **Prep Batch: 730790**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		11/17/25 10:35	11/18/25 10:17	1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 410-730790/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 731639 — **Prep Batch: 730790**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	422	463		mg/Kg		110	70 - 130

Lab Sample ID: 410-251910-C-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 731639 — **Prep Batch: 730790**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	59000	4	2510	72700	4	mg/Kg	☼	537	70 - 130

Lab Sample ID: 410-251910-C-1-E DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 731639 — **Prep Batch: 730790**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	59000	4	70200		mg/Kg	☼	17	20

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-506069/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506193

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			11/11/25 13:22	1

Lab Sample ID: LCS 180-506069/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506193

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	21.2		mg/Kg		106	90 - 110

Lab Sample ID: 180-198247-1 MS — **Client Sample ID: 251106010-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506193

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	9.7	FL	59.7	64.8		mg/Kg	☼	92	90 - 110

Lab Sample ID: 180-198247-1 MSD — **Client Sample ID: 251106010-01**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 506193

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	9.7	FL	59.8	62.6	FL	mg/Kg	☼	89	90 - 110	3	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-198054-C-1 DU
Matrix: Solid
Analysis Batch: 506061

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	80			78.7		%				2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

HPLC/IC

Leach Batch: 506079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Soluble	Solid	DI Leach	
MB 180-506079/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-506079/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-198164-B-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
180-198164-B-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 506165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-506079/1-A	Method Blank	Soluble	Solid	EPA 9056A	506079
LCS 180-506079/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	506079
180-198164-B-1-B MS	Matrix Spike	Soluble	Solid	EPA 9056A	506079
180-198164-B-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 9056A	506079

Analysis Batch: 506237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Soluble	Solid	EPA 9056A	506079
MB 180-506079/1-A	Method Blank	Soluble	Solid	EPA 9056A	506079
LCS 180-506079/2-A	Lab Control Sample	Soluble	Solid	EPA 9056A	506079

Metals

Prep Batch: 730108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Total/NA	Solid	3050B	
MB 410-730108/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-730108/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 731012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Total/NA	Solid	6020B	730108
MB 410-730108/1-A	Method Blank	Total/NA	Solid	6020B	730108
LCS 410-730108/2-A	Lab Control Sample	Total/NA	Solid	6020B	730108

Analysis Batch: 731015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Total/NA	Solid	6020B	730108
LCS 410-730108/2-A	Lab Control Sample	Total/NA	Solid	6020B	730108

General Chemistry

Analysis Batch: 506061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Total/NA	Solid	SM 2540G	
180-198054-C-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

Leach Batch: 506069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Soluble	Solid	DI Leach	
MB 180-506069/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-506069/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-198247-1 MS	251106010-01	Soluble	Solid	DI Leach	
180-198247-1 MSD	251106010-01	Soluble	Solid	DI Leach	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198247-1
SDG: 251106010

General Chemistry

Analysis Batch: 506193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Soluble	Solid	EPA 353.2	506069
MB 180-506069/1-A	Method Blank	Soluble	Solid	EPA 353.2	506069
LCS 160-506069/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	506069
180-198247-1 MS	251106010-01	Soluble	Solid	EPA 353.2	506069
180-198247-1 MSD	251106010-01	Soluble	Solid	EPA 353.2	506069

Prep Batch: 730790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196247-1	251106010-01	Total/NA	Solid	351.2	
MB 410-730790/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-730790/1-A	Lab Control Sample	Total/NA	Solid	351.2	
410-251910-C-1-D MS	Matrix Spike	Total/NA	Solid	351.2	
410-251910-C-1-E DU	Duplicate	Total/NA	Solid	351.2	

Analysis Batch: 731639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198247-1	251106010-01	Total/NA	Solid	351.2	730790
MB 410-730790/2-A	Method Blank	Total/NA	Solid	351.2	730790
LCS 410-730790/1-A	Lab Control Sample	Total/NA	Solid	351.2	730790
410-251910-C-1-D MS	Matrix Spike	Total/NA	Solid	351.2	730790
410-251910-C-1-E DU	Duplicate	Total/NA	Solid	351.2	730790

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251106010**

Additional Information : Limed Sludge Monthly

Sample composited on 11/6 - grabs 11/2,11/4,11/5

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn, Al, Fe			
							Number of Containers					
251106010-01	11/5/25	2000	S	N	C	5 DAY TURN AROUND	1	1	1			

180-198247 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	11-07-25	1222		Eurofins Pgh	11/07/25	1222
	ERIE NE	11/07/25	1300			11/7/25	1300

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required

COC Analyst Cooler Review: Initials: MEG Date: 11/7/25

Supervisor Review: Initials: Date: 11-6-25

180-198247 Waybill

#28

B3 cf +0.4

4.1 / 4.5

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-548504.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-198247-1
Address: 2425 New Holland Pike,	Due Date Requested: 11/17/2025			
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Limed Sludge Monthly	Project #: 16007110			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_PrepNitrogen, Total Kjeldahl	6020B/3050B(HCO3) PPL Metals by ICP/MS 6020B										Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X												X	
251105010-01 (180-198247-1)	11/5/25	20:00 Eastern	G	Solid			X	X										1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/10/25 1500	E/LE	MA	11/10/25 1500	E/LE
MA	11/10/25 1830	E/LE			
			[signature]	11/10/25 1830	[signature]

Custody Seals Intact: ☒ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R:3.7 C:3.8

Ver: 10/10/2024

11/18/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-198247-1
SDG Number: 251106010

Login Number: 198247
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-198247-1
SDG Number: 251106010

Login Number: 198247
List Number: 2
Creator: Williams, Aeric

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 11/11/25 08:37 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample contsiners are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251105009 **Sample Date:** 11/5/2025

Sample ID Number: 251105009-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	11/11/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	11/10/2025	30	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

Larissa Hoover

11-25-25

Date

Printed Date

Tuesday, November 25, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 11/13/2025 3:28:23 AM

JOB DESCRIPTION

Limed Sludge Monthly
251105009

JOB NUMBER

180-198245-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 12
Chain of Custody 13
Receipt Checklists 14

Job ID: 180-198245-1 — Eurofins Pittsburgh

Job Narrative
180-198245-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 11/7/2025 1:00 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was **4.5**°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

PCBs
Method 8082A: The following sample required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 251105009-01 (180-198245-1).6215174

Method 8082A: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 251105009-01 (180-198245-1).6239381
6513163

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198245-1
SDG: 251105009

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198245-1
SDG: 251105009

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198245-1
SDG: 251105009

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-198245-1	251105009-01	Solid	11/05/25 10:49	11/07/25 13:00	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198245-1
SDG: 251105009

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory Referencee:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198245-1
SDG: 251105009

Client Sample ID: 251105009-01 **Lab Sample ID: 180-198245-1**
Date Collected: 11/05/25 10:49 **Matrix: Solid**
Date Received: 11/07/25 13:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			506061	11/10/25 10:04	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251105009-01 **Lab Sample ID: 180-198245-1**
Date Collected: 11/05/25 10:49 **Matrix: Solid**
Date Received: 11/07/25 13:00 **Percent Solids: 30.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	506035	11/10/25 05:31	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	506133	11/11/25 11:24	JMO	EET PIT
	Instrument ID: CHGC8									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

MKK = Mary Kenny

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198245-1
SDG: 251105009

Client Sample ID: 251105009-01
Date Collected: 11/05/25 10:49
Date Received: 11/07/25 13:00

Lab Sample ID: 180-198245-1
Matrix: Solid
Percent Solids: 30.0

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		56		ug/Kg	☼	11/10/25 05:31	11/11/25 11:24	1
PCB-1221	ND		56		ug/Kg	☼	11/10/25 05:31	11/11/25 11:24	1
PCB-1232	ND		56		ug/Kg	☼	11/10/25 05:31	11/11/25 11:24	1
PCB-1242	ND		56		ug/Kg	☼	11/10/25 05:31	11/11/25 11:24	1
PCB-1248	ND		56		ug/Kg	☼	11/10/25 05:31	11/11/25 11:24	1
PCB-1254	**340**		56		ug/Kg	☼	11/10/25 05:31	11/11/25 11:24	1
PCB-1260	ND		56		ug/Kg	☼	11/10/25 05:31	11/11/25 11:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*74*		*17 - 144*	*11/10/25 05:31*	*11/11/25 11:24*	*1*
Tetrachloro-m-xylene (Surr)	*67*		*17 - 144*	*11/10/25 05:31*	*11/11/25 11:24*	*1*
DCB Decachlorobiphenyl (Surr)	*70*		*26 - 142*	*11/10/25 05:31*	*11/11/25 11:24*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*26 - 142*	*11/10/25 05:31*	*11/11/25 11:24*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**30**		0.50		%			11/10/25 10:04	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198245-1
SDG: 251105009

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-506035/1-A
Matrix: Solid
Analysis Batch: 506039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506035

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		11/10/25 05:31	11/10/25 21:41	1
PCB-1221	ND		17		ug/Kg		11/10/25 05:31	11/10/25 21:41	1
PCB-1232	ND		17		ug/Kg		11/10/25 05:31	11/10/25 21:41	1
PCB-1242	ND		17		ug/Kg		11/10/25 05:31	11/10/25 21:41	1
PCB-1248	ND		17		ug/Kg		11/10/25 05:31	11/10/25 21:41	1
PCB-1254	ND		17		ug/Kg		11/10/25 05:31	11/10/25 21:41	1
PCB-1260	ND		17		ug/Kg		11/10/25 05:31	11/10/25 21:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*80*		*17 - 144*	*11/10/25 05:31*	*11/10/25 21:41*	*1*
Tetrachloro-m-xylene (Surr)	*79*		*17 - 144*	*11/10/25 05:31*	*11/10/25 21:41*	*1*
DCB Decachlorobiphenyl (Surr)	*73*		*26 - 142*	*11/10/25 05:31*	*11/10/25 21:41*	*1*
DCB Decachlorobiphenyl (Surr)	*72*		*26 - 142*	*11/10/25 05:31*	*11/10/25 21:41*	*1*

Lab Sample ID: LCS 180-506035/2-A
Matrix: Solid
Analysis Batch: 506039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506035

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	998		ug/Kg		75	53 - 115
PCB-1260	1330	997		ug/Kg		75	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*90*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*88*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*82*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*78*		*26 - 142*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-198054-C-1 DU
Matrix: Solid
Analysis Batch: 506061

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	80		78.7		%		2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-198245-1
SDG: 251105009

GC Semi VOA

Prep Batch: 506035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198245-1	251105009-01	Total/NA	Solid	3541	
MB 180-506035/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-506035/2-A	Lab Control Sample	Total/NA	Solid	3541	

Analysis Batch: 506039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-506035/1-A	Method Blank	Total/NA	Solid	EPA 8082A	506035
LCS 180-506035/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	506035

Analysis Batch: 506133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198245-1	251105009-01	Total/NA	Solid	EPA 8082A	506035

General Chemistry

Analysis Batch: 506061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-198245-1	251105009-01	Total/NA	Solid	SM 2540G	
180-198064-C-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251105009**

Additional Information : Limed Sludge Monthly

Tests to be Performed: Total Solids, PCB

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers
251105009-01	11/5/25	1049	S	N	G	** 5 day rush**	1

180-198245 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	11-07-25	1222	[signature]	Eurofins Pgh	11/07/25	1222
[signature]	ERLINE	11/07/25	1300	[signature]	ERLINE	11/7/25	1300

COC Analyst Cooler Review: Initials: AEG Date: 11/7/25

Supervisor Review: Initials: [signature] Date: 11-6-25

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-198245-1
SDG Number: 251105009

Login Number: 198245
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251204011 **Sample Date:** 12/3/2025

Sample ID Number: 251204011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Ammonia-Nitrogen Dry	SM4500-NH3-F-2011	tbradley2	12/9/2025	2480	mg/Dry Kg	65.2	S	MS and RPD passed criteria. MSD recovered high. Matrix spikes demonstrated sample is possible non-homogenous.
Ammonia-Nitrogen Wet	SM4500-NH3-F-2011	tbradley2	12/9/2025	711	mg/Wet Kg	227	S	MS and RPD passed criteria. MSD recovered high. Matrix spikes demonstrated sample is possible non-homogenous.
Contract Lab								
Kjeldahl Nitrogen, Total Dry	Contract Lab	EurofinsLancaster	12/12/2025	25000	mg/kg dry	10000		
Nitrate-Nitrogen	Contract Lab	EurofinsLancaster	12/31/2025	<4.7	mg/kg dry	4.7		
Nitrite Nitrate-Nitrogen	Contract Lab	EurofinsPittsburgh	12/10/2025	<3.1	mg/kg dry	3.1		
Nitrite-Nitrogen	Contract Lab	EurofinsLancaster	12/31/2025	<3.1	mg/kg dry	3.1		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	12/9/2025	32	%	0.50		
Metals								
Aluminum	Contract Lab	EurofinsLancaster	12/11/2025	8500	mg/kg dry	52		
Arsenic	Contract Lab	EurofinsLancaster	12/11/2025	5.8	mg/kg dry	1.0		

Printed Date
Tuesday, January 6, 2026

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251204011 **Sample Date:** 12/3/2025

Sample ID Number: 251204011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Cadmium	Contract Lab	EurofinsLancaster	12/11/2025	0.66	mg/kg dry	0.26		
Calcium	Contact Lab	EurofinsLancaster	12/11/2025	78000	mg/kg dry	100		
Chromium	Contract Lab	EurofinsLancaster	12/11/2025	32	mg/kg dry	1.0		
Copper	Contract Lab	EurofinsLancaster	12/11/2025	240	mg/kg dry	1.0		
Iron	Contract Lab	EurofinsLancaster	12/11/2025	33000	mg/kg dry	52		
Lead	Contract Lab	EurofinsLancaster	12/11/2025	29	mg/kg dry	0.52		
Mercury, Total	EPA 7471B	jweaver	12/8/2025	0.30	mg/Dry Kg	0.295		
Molybdenum	Contract Lab	EurofinsLancaster	12/11/2025	7.4	mg/kg dry	0.52		
Nickel	Contract Lab	EurofinsLancaster	12/11/2025	17	mg/kg dry	1.0		
Phosphorus, Total	Contract Lab ~~EPA6010C~~ RH 1-6-26	RJLeeGroup	12/8/2025	8710	mg/kg dry	47.8		Subcontract lab dries sample prior to sample analysis. Therefore, the reported result is on a dry weight basis.
Potassium	Contract Lab	EurofinsLancaster	12/11/2025	2200	mg/kg dry	100		
Selenium	Contract Lab	EurofinsLancaster	12/11/2025	3.7	mg/kg dry	1.0		
Zinc	Contract Lab	EurofinsLancaster	12/11/2025	460	mg/kg dry	78		

Printed Date
Tuesday, January 6, 2026

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251204011 **Sample Date:** 12/3/2025

Sample ID Number: 251204011-01 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
S	Matrix spike % recovery outside acceptable range

Comments:

Samples comp Dec 4 from samples collect Dec 1, Dec 2, Dec 3

Contract Lab	Contract Lab Certification Number
RJLeeGroup	PADEP 02-00396
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Alissa Hoover 1-6-26

Date

Printed Date
Tuesday, January 6, 2026

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251204011 **Sample Date:** 12/3/2025

Sample ID Number: 251204011-01A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	SM 2540G - 2015	bbatson	12/5/2025	28.7	%			

Data Qualifier **Data Qualifier Description**

Comments:

Samples comp Dec 4 from samples collect Dec 1, Dec 2, Dec 3

Released by:

Larissa Hoover

1-6-26

Date

Printed Date
Tuesday, January 6, 2026

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 12/31/2025 11:39:08 AM

JOB DESCRIPTION

Limed Sludge Monthly
251204011

JOB NUMBER

180-199439-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 14
Chain of Custody 16
Receipt Checklists 18

Job Narrative
180-199439-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 12/5/2025 2:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.5°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 351.2: The method blank for preparation batch 410-743028 and analytical batch 410-743529 contained TKN above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
FL	MS and/or MSD recovery below control limits.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-199439-1	251204011-01	Solid	12/03/25 17:00	12/05/25 14:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

Method	Method Description	Protocol	Laboratory
9056A	Anions, Ion Chromatography	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
EPA 353.2	Nitrogen, Nitrate-Nitrite	EPA	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
351.2	Nitrogen, Total Kjeldahl	EPA	ELLE
DI Leach	Deionized Water Leaching Procedure	ASTM	EET PIT
DI Leach	Deionized Water Leaching Procedure	ASTM	ELLE

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

Client Sample ID: 251204011-01 **Lab Sample ID: 180-199439-1**
Date Collected: 12/03/25 17:00 **Matrix: Solid**
Date Received: 12/05/25 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			507575	12/09/25 15:12	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251204011-01 **Lab Sample ID: 180-199439-1**
Date Collected: 12/03/25 17:00 **Matrix: Solid**
Date Received: 12/05/25 14:30 **Percent Solids: 32.1**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	749946	12/29/25 15:56	L4QM	ELLE
Soluble	Analysis	9056A		1	1 mL	1 mL	750976	12/31/25 01:55	L4QM	ELLE
	Instrument ID: 23204									
Total/NA	Prep	3050B			1.19 g	100 mL	742287	12/10/25 22:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			742710	12/11/25 11:18	F7JF	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	351.2			0.25 g	25 mL	743028	12/12/25 08:35	ZC9A	ELLE
Total/NA	Analysis	351.2		20			743529	12/12/25 15:55	UJE2	ELLE
	Instrument ID: 5791									
Soluble	Leach	DI Leach			5.00 g	50.0 mL	507632	12/10/25 07:45	RSK	EET PIT
Soluble	Analysis	EPA 353.2		1			507646	12/10/25 13:50	RSK	EET PIT
	Instrument ID: ASTORIA2									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Leach
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Leach
  - L4QM = Jacquelyn Schoener
- Batch Type: Prep
  - UAMX = Annamaria Kuhns
  - ZC9A = Lohana Pimenta-Hartz
- Batch Type: Analysis
  - F7JF = Dennis Dick
  - L4QM = Jacquelyn Schoener
  - UJE2 = Joseph McKenzie

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

Client Sample ID: 251204011-01
Date Collected: 12/03/25 17:00
Date Received: 12/05/25 14:30

Lab Sample ID: 180-199439-1
Matrix: Solid
Percent Solids: 32.1

Method: SW846 9056A - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		3.1		mg/Kg	☼		12/31/25 01:55	1
Nitrate as N	ND		4.7		mg/Kg	☼		12/31/25 01:55	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.8		1.0		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Cadmium	0.66		0.26		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Calcium	78000		100		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Chromium	32		1.0		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Copper	240		1.0		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Lead	29		0.52		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Molybdenum	7.4		0.52		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Nickel	17		1.0		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Potassium	2200		100		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Selenium	3.7		1.0		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Zinc	460		78		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Iron	33000		52		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2
Aluminum	8500		52		mg/Kg	☼	12/10/25 22:00	12/11/25 11:18	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen (EPA 351.2)	25000		10000		mg/Kg	☼	12/12/25 08:35	12/12/25 16:55	20
Total Solids (SM 2540G)	32		0.50		%			12/09/25 15:12	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N (EPA 353.2)	ND		3.1		mg/Kg	☼		12/10/25 13:50	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 410-749946/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 750976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		1.0		mg/Kg			12/31/25 00:25	1
Nitrate as N	ND		1.5		mg/Kg			12/31/25 00:25	1

Lab Sample ID: LCS 410-749946/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 750976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	10.0	10.3		mg/Kg		103	90 - 110
Nitrate as N	10.0	9.72		mg/Kg		97	90 - 110

Lab Sample ID: 180-199188-D-9-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 750976

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		11.3	10.7		mg/Kg	☼	94	90 - 110
Nitrate as N	4.8	FL	11.3	14.7	FL	mg/Kg	☼	88	90 - 110

Lab Sample ID: 180-199188-D-9-G DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 750976

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrite as N	ND		ND		mg/Kg	☼	NC	15
Nitrate as N	4.8	FL	4.98		mg/Kg	☼	3	15

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-742287/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 742710 — **Prep Batch: 742287**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Cadmium	ND		0.10		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Calcium	ND		40		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Chromium	ND		0.40		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Copper	ND		0.40		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Lead	ND		0.20		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Molybdenum	ND		0.20		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Nickel	ND		0.40		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Potassium	ND		40		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Selenium	ND		0.40		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Zinc	ND		30		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Iron	ND		20		mg/Kg		12/10/25 22:00	12/11/25 10:52	2
Aluminum	ND		20		mg/Kg		12/10/25 22:00	12/11/25 10:52	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-742287/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 742710 — **Prep Batch: 742287**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	47.6		mg/Kg		95	84 - 114
Cadmium	5.00	4.81		mg/Kg		96	85 - 117
Calcium	500	476		mg/Kg		95	81 - 119
Chromium	50.0	49.2		mg/Kg		98	83 - 116
Copper	50.0	48.7		mg/Kg		97	83 - 115
Lead	5.00	4.99		mg/Kg		100	85 - 119
Molybdenum	5.00	5.08		mg/Kg		102	83 - 119
Nickel	50.0	48.3		mg/Kg		97	84 - 116
Potassium	500	475		mg/Kg		95	83 - 118
Selenium	10.0	9.78		mg/Kg		98	83 - 115
Zinc	50.0	48.0		mg/Kg		96	84 - 116
Iron	500	489		mg/Kg		98	84 - 118
Aluminum	500	484		mg/Kg		97	82 - 119

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 410-743028/2-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 743529 — **Prep Batch: 743028**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		160		mg/Kg		12/12/25 08:35	12/12/25 14:46	1

Lab Sample ID: LCS 410-743028/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 743529 — **Prep Batch: 743028**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	500	484		mg/Kg		97	70 - 130

Lab Sample ID: 460-340540-B-1-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 743529 — **Prep Batch: 743028**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Total Kjeldahl Nitrogen	3000		1260	4690		mg/Kg	☼	129	70 - 130

Lab Sample ID: 460-340540-B-1-E DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 743529 — **Prep Batch: 743028**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Kjeldahl Nitrogen	3000		3610	F5	mg/Kg	☼	26	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

Method: EPA 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 180-507632/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 507646

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	ND		1.0		mg/Kg			12/10/25 13:36	1

Lab Sample ID: LCS 180-507632/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 507646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	20.0	20.5		mg/Kg		103	90 - 110

Lab Sample ID: 180-199356-A-1-M MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 507646

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate Nitrite as N	ND		37.0	36.6		mg/Kg	☼	99	90 - 110

Lab Sample ID: 180-199356-A-1-N MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 507646

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate Nitrite as N	ND		37.1	35.0		mg/Kg	☼	94	90 - 110	4	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-199439-1 DU — **Client Sample ID: 251204011-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 507575

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	32		33.0		%		3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

HPLC/IC

Leach Batch: 749946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Soluble	Solid	DI Leach	
MB 410-749948/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 410-749946/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-199188-D-9-H MS	Matrix Spike	Soluble	Solid	DI Leach	
180-199188-D-9-G DU	Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 750976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Soluble	Solid	9056A	749946
MB 410-749948/1-A	Method Blank	Soluble	Solid	9056A	749946
LCS 410-749946/2-A	Lab Control Sample	Soluble	Solid	9056A	749946
180-199188-D-9-H MS	Matrix Spike	Soluble	Solid	9056A	749946
180-199188-D-9-G DU	Duplicate	Soluble	Solid	9056A	749948

Metals

Prep Batch: 742287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Total/NA	Solid	3050B	
MB 410-742287/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-742287/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 742710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Total/NA	Solid	6020B	742287
MB 410-742287/1-A	Method Blank	Total/NA	Solid	6020B	742287
LCS 410-742287/2-A	Lab Control Sample	Total/NA	Solid	6020B	742287

General Chemistry

Analysis Batch: 507575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Total/NA	Solid	SM 2540G	
180-199439-1 DU	251204011-01	Total/NA	Solid	SM 2540G	

Leach Batch: 507632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Soluble	Solid	DI Leach	
MB 180-507632/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 180-507632/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
180-199356-A-1-M MS	Matrix Spike	Soluble	Solid	DI Leach	
180-199356-A-1-N MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 507646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Soluble	Solid	EPA 353.2	507632
MB 180-507632/1-A	Method Blank	Soluble	Solid	EPA 353.2	507632
LCS 180-507632/2-A	Lab Control Sample	Soluble	Solid	EPA 353.2	507632
180-199356-A-1-M MS	Matrix Spike	Soluble	Solid	EPA 353.2	507632
180-199356-A-1-N MSD	Matrix Spike Duplicate	Soluble	Solid	EPA 353.2	507632

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199439-1
SDG: 251204011

General Chemistry

Prep Batch: 743028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Total/NA	Solid	351.2	
MB 410-743028/2-A	Method Blank	Total/NA	Solid	351.2	
LCS 410-743028/1-A	Lab Control Sample	Total/NA	Solid	351.2	
460-340540-B-1-F MS	Matrix Spike	Total/NA	Solid	351.2	
460-340540-B-1-E DU	Duplicate	Total/NA	Solid	351.2	

Analysis Batch: 743529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199439-1	251204011-01	Total/NA	Solid	351.2	743028
MB 410-743028/2-A	Method Blank	Total/NA	Solid	351.2	743028
LCS 410-743028/1-A	Lab Control Sample	Total/NA	Solid	351.2	743028
460-340540-B-1-F MS	Matrix Spike	Total/NA	Solid	351.2	743028
460-340540-B-1-E DU	Duplicate	Total/NA	Solid	351.2	743028

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251204011**

Additional Information : Limed Sludge Monthly

Sample composited on 12/4 - grabs 12/1,12/2,12/3

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen (Savannah GA Lab)	Percent Total Solids SM2540G (Pgh Lab)	As, Cd, Ca, Cr, Cu, Pb, Mo, Ni, K, Se, Zn, Al, Fe			
							Number of Containers					
251204011-01	12/3/25	1700	S	N	C	5 DAY TURN AROUND	1	1	1			

180-199439 Chain of Custody

BS #20 cf-0.7 4.2-13.5

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	12/5/25	1301	[signature]	Eurofins Pgh	12/05/25	1301
[signature]	ELINE	12/05/25	1430	[signature]	[illegible]	12/5/25	1430
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note Savannah GA Test America - TKN, Nitrate, Nitrite, Nitrate-Nitrite Nitrogen, report "As Received" Pittsburgh Test America - % Solids SM2540G to calc dry weight results PADEP Accredited test methods required

COC Analyst Cooler Review: Initials: [illegible] Date: 12/31/24 Supervisor Review: Initials: [illegible] Date: [illegible]

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-550101.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-199439-1
Address: 2425 New Holland Pike,	Due Date Requested: 12/11/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Limed Sludge Monthly	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil=Tissue, Air=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2/351.2_PrepNitrogen, Total Kjeldahl	6020B/3050B(MOD) PPL Metals by ICP/MS 6020B	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X			X	
251204011-01 (180-199439-1)	12/3/25	17:00 Eastern	G	Solid			X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
James J. Hinkelman	12/8/25 13:00	EPHWE	MA	12.8.25 1400	EHE
MA	12.8.25 1830	EHE			
				12/8/25 1830	

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: K 2.7 C 2.8

Ver: 10/10/2024
12/31/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-199439-1
SDG Number: 251204011

Login Number: 199439
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-199439-1
SDG Number: 251204011

Login Number: 199439
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 12/08/25 01:22 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

RJ Lee Group

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: (724) 325-1776 | Fax: (724) 733-1799

LABORATORY REPORT

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Attn: Larissa Hoover
Phone: 412-766-4810
Fax: 412-732-6023
Email: larissa.hoover@alcosan.org

RJ Lee Group Job No.: PA051220250003
Samples Received: December 5, 2025
Report Date: December 11, 2025
Client Project: 251204011
Purchase Order No.: N/A
Matrix: Solid
Prep/Analysis: EPA 3051 / EPA 6010C

Client Sample ID	RJ Lee Group ID	Sampling Date	Analyte	Sample Concentration		Minimum Reporting Limit		Analysis Date	Q
				Weight Percent (%)	Parts per Million (PPM) - mg/kg	Weight Percent (%)	Parts per Million (PPM) - mg/kg		
251204011-01	PA051220250003-001	12/03/2025, 05:00 PM	Phosphorus	0.871	8710	0.00478	47.8	12/08/2025	P

Comments: Results on a dried weight basis

Report Qualifiers (Q):

P : PA-DEP Accredited (PA DEP Lab ID 02-00396, NELAP)
N : NY ELAP Accredited (NY ELAP Lab Code 10964)

A: AIHA LAP, LLC Accredited (Lab ID 100364)
— : Test (analyte-matrix-preparation-analysis) is performed under RJLG's General Quality System requirements and is not part to any of the above scopes of accreditations

E = Value above highest calibration standard
J = Value below lowest calibration standard but above MDL (Method Detection Limit)
L = LCS (Laboratory Control Standard)/SRM (Standard Reference Material) recovery outside accepted recovery limits
H = Holding times for preparation or analysis exceeded

B = Analyte detected in the associated Method Blank
S = Spike Recovery outside accepted limits
R = RPD (relative percent difference) outside accepted limits
D = RL (reporting limit verification) outside accepted limits
NP = Not Provided

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of thirty (30) days before discarding. A shipping and handling fee will be assessed for the return of any samples.
This laboratory operates in accord with ISO 17025:2017 guidelines, and holds a limited scope of accreditations under different accrediting agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and current status. Unless it is specifically stated otherwise (under the Q column using the appropriate accrediting agency qualifier(s)) the work contained in this report is performed under RJLG's General Quality System requirements and is not part of any scope of accreditations. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid.

Unless otherwise noted (either in the comments section of the report and/or with the appropriate qualifiers under the report qualifiers (Q) column) the following apply: (a) Samples were received in good condition, (b) All QC samples are within acceptable established limits, (c) All samples designated as NELAP meet the requirements of the NELAC standard; if not applicable qualifiers will be used to designate the non-compliance and (d) Results have not been blank corrected. Quality Control data is available upon request.

Philip Grindle

Philip Grindle
Laboratory Manager Inorganic Chemistry

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Limed Sludge Monthly

Lab ID Number: 251202014 **Sample Date:** 12/2/2025

Sample ID Number: 251202014-01 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
PCBs	Contract Lab	EurofinsPittsburgh	12/5/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	12/5/2025	30	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

Larissa Hawk

12-29-25

Date

Printed Date

Monday, December 29, 2025

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ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 12/10/2025 9:58:03 AM

JOB DESCRIPTION

Limed Sludge Monthly
251202014

JOB NUMBER

180-199271-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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12/10/2025 9:58:03 AM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 13
Chain of Custody 14
Receipt Checklists 15

Job Narrative
180-199271-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 12/3/2025 2:45 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.5°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

PCBs
Method 8082A: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 251202014-01 (180-199271-1), (180-199271-A-1-A MS) and (180-199271-A-1-B MSD).6215174

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 251202014-01 (180-199271-1), (180-199271-A-1-A MS) and (180-199271-A-1-B MSD).6239381
6513163

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199271-1
SDG: 251202014

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199271-1
SDG: 251202014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-199271-1	251202014-01	Solid	12/02/25 11:00	12/03/25 14:45	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199271-1
SDG: 251202014

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199271-1
SDG: 251202014

Client Sample ID: 251202014-01 **Lab Sample ID: 180-199271-1**
Date Collected: 12/02/25 11:00 **Matrix: Solid**
Date Received: 12/03/25 14:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			507434	12/05/25 16:54	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251202014-01 **Lab Sample ID: 180-199271-1**
Date Collected: 12/02/25 11:00 **Matrix: Solid**
Date Received: 12/03/25 14:45 **Percent Solids: 30.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	20.0 mL	507385	12/04/25 14:11	DVC	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	507396	12/05/25 09:56	JMO	EET PIT
	Instrument ID: CHGC8									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

DVC = Daniel Capodanno

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Oravec

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199271-1
SDG: 251202014

Client Sample ID: 251202014-01
Date Collected: 12/02/25 11:00
Date Received: 12/03/25 14:45

Lab Sample ID: 180-199271-1
Matrix: Solid
Percent Solids: 30.4

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		54		ug/Kg	☼	12/04/25 14:11	12/05/25 09:56	1
PCB-1221	ND		54		ug/Kg	☼	12/04/25 14:11	12/05/25 09:56	1
PCB-1232	ND		54		ug/Kg	☼	12/04/25 14:11	12/05/25 09:56	1
PCB-1242	ND		54		ug/Kg	☼	12/04/25 14:11	12/05/25 09:56	1
PCB-1248	ND		54		ug/Kg	☼	12/04/25 14:11	12/05/25 09:56	1
PCB-1254	ND		54		ug/Kg	☼	12/04/25 14:11	12/05/25 09:56	1
PCB-1260	ND		54		ug/Kg	☼	12/04/25 14:11	12/05/25 09:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*101*		*17 - 144*	*12/04/25 14:11*	*12/05/25 09:56*	*1*
Tetrachloro-m-xylene (Surr)	*91*		*17 - 144*	*12/04/25 14:11*	*12/05/25 09:56*	*1*
DCB Decachlorobiphenyl (Surr)	*99*		*26 - 142*	*12/04/25 14:11*	*12/05/25 09:56*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*26 - 142*	*12/04/25 14:11*	*12/05/25 09:56*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**30**		0.50		%			12/05/25 16:54	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199271-1
SDG: 251202014

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-507385/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 507396 — **Prep Batch: 507385**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		12/04/25 14:11	12/05/25 09:20	1
PCB-1221	ND		17		ug/Kg		12/04/25 14:11	12/05/25 09:20	1
PCB-1232	ND		17		ug/Kg		12/04/25 14:11	12/05/25 09:20	1
PCB-1242	ND		17		ug/Kg		12/04/25 14:11	12/05/25 09:20	1
PCB-1248	ND		17		ug/Kg		12/04/25 14:11	12/05/25 09:20	1
PCB-1254	ND		17		ug/Kg		12/04/25 14:11	12/05/25 09:20	1
PCB-1260	ND		17		ug/Kg		12/04/25 14:11	12/05/25 09:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*67*		*17 - 144*	*12/04/25 14:11*	*12/05/25 09:20*	*1*
Tetrachloro-m-xylene (Surr)	*66*		*17 - 144*	*12/04/25 14:11*	*12/05/25 09:20*	*1*
DCB Decachlorobiphenyl (Surr)	*97*		*26 - 142*	*12/04/25 14:11*	*12/05/25 09:20*	*1*
DCB Decachlorobiphenyl (Surr)	*102*		*26 - 142*	*12/04/25 14:11*	*12/05/25 09:20*	*1*

Lab Sample ID: LCS 180-507385/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 507396 — **Prep Batch: 507385**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	996		ug/Kg		75	53 - 115
PCB-1260	1330	1150		ug/Kg		86	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*97*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*94*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*94*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*96*		*26 - 142*

Lab Sample ID: 180-199271-1 MS — **Client Sample ID: 251202014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 507396 — **Prep Batch: 507385**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		4380	4200		ug/Kg	☼	96	53 - 115
PCB-1250	ND		4380	4250		ug/Kg	☼	97	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*105*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*94*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*99*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*99*		*26 - 142*

Lab Sample ID: 180-199271-1 MSD — **Client Sample ID: 251202014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 507396 — **Prep Batch: 507385**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		4300	3830		ug/Kg	☼	89	53 - 115	9	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-199271-1 MSD — **Client Sample ID: 251202014-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 507396 — **Prep Batch: 507385**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		4300	3930		ug/Kg	☼	92	45 - 108	8	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*97*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*93*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*94*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*97*		*26 - 142*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-199188-A-12 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 507434

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	86		85.7		%		0.2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Limed Sludge Monthly

Job ID: 180-199271-1
SDG: 251202014

GC Semi VOA

Prep Batch: 507385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199271-1	251202014-01	Total/NA	Solid	3541	
MB 180-507385/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-507385/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-199271-1 MS	251202014-01	Total/NA	Solid	3541	
180-199271-1 MSD	251202014-01	Total/NA	Solid	3541	

Analysis Batch: 507396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199271-1	251202014-01	Total/NA	Solid	EPA 8082A	507385
MB 180-507385/1-A	Method Blank	Total/NA	Solid	EPA 8082A	507385
LCS 180-507385/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	507385
180-199271-1 MS	251202014-01	Total/NA	Solid	EPA 8082A	507385
180-199271-1 MSD	251202014-01	Total/NA	Solid	EPA 8082A	507385

General Chemistry

Analysis Batch: 507434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-199271-1	251202014-01	Total/NA	Solid	SM 2540G	
180-199188-A-12 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251202014**

Additional Information : Limed Sludge Monthly

Tests to be Performed: Total Solids, PCB

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers
251202014-01	12/2/2025	1100	S	N	G	** 5 day rush**	1

180-199271 Chain of Custody

B5 #28
cf+0.4
2.1/2.5

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Mary Dobransky	ALCOSAN	12/03/25	1320	[signature]	Eurofins Pgh	12/03/25	1320
[signature]	EPA NE	12/03/25	1445	[signature]	EPA NE	12/3/25	1445

COC Analyst Cooler Review: Initials: HEG Date: 12/3/25

Supervisor Review: Initials: [initials] Date: 12-2-25

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-199271-1
SDG Number: 251202014

Login Number: 199271
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with Immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

3300 Preble Avenue
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ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

REVISED

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-06 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
COD	Contract Lab	EurofinsPittsburgh	2/19/2025	1400	mg/L	100		
Cyanide, Total	Contract Lab	EurofinsPittsburgh	2/18/2025	12	ug/L	10		
Ammonia-Nitrogen	Contract Lab	EurofinsPittsburgh	2/19/2025	31	mg/L	5.0		
Nitrate, as Nitrogen	Contract Lab	EurofinsPittsburgh	2/18/2025	<0.10	mg/L	0.10		
pH	Contract Lab	EurofinsPittsburgh	2/18/2025	12.01	s.u.	0.1		
ASTM pH Temperature	Contract Lab	EurofinsPittsburgh	2/18/2025	25.0	°C	0.1	!	Laboratory is not accredited for this parameter. See Eurofins report for more details.
Sulfates	Contract Lab	EurofinsPittsburgh	2/18/2025	<1.0	mg/L	1.0		
Total Solids	Contract Lab	EurofinsPittsburgh	2/19/2025	2300	mg/L	20		
Total Volatile Solids	Contract Lab	EurofinsPittsburgh	2/19/2025	1100	mg/L	20	!	Laboratory is not accredited for this parameter. See Eurofins report for more details.
Chemistry								
Cyanide, Total	Contract Lab	EurofinsLancaster	2/15/2025	8.7	mg/Dry Kg	1.3		
Contract Lab								
Ignitability	Contract Lab	EurofinsPittsburgh	2/20/2025	>140	°F			
Chlordane	Contract Lab	EurofinsPittsburgh	2/21/2025	<250	ug/Kg Dry	250		

Printed Date
Tuesday, April 1, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-06 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Paint Filter Test	Contract Lab	EurofinsLancaster	2/18/2025	CNF		0.10		Contains No Free liquids.
Reactive Cyanide	Contract Lab	EurofinsLancaster	2/25/2025	<90	mg/kg	90	*+	LCS and/or LCSD is outside acceptance limits, high biased.
Reactive Sulfide	Contract Lab	EurofinsLancaster	2/24/2025	<160	mg/kg	160		
Thallium	Contract Lab	EurofinsLancaster	2/24/2025	<8.5	mg/Dry Kg	8.5		
Total Sulfide	Contract Lab	EurofinsLancaster	2/17/2025	<90	mg/Dry Kg	90		
Total Sulfur	Contract Lab	EurofinsPittsburgh	2/24/2025	6100	mg/Dry Kg	140		
Toxaphene	Contract Lab	EurofinsPittsburgh	2/21/2025	<1000	ug/Kg Dry	1000		
Herbicides	Contract Lab	EurofinsPittsburgh	2/20/2025	See attached report	ug/Kg Dry	60		
Daily 1								
Percent Fixed Solids	SM 2540G - 2015	lfalck/snixon	2/18/2025	45.39	%			
Percent Total Solids	SM 2540G - 2015	lfalck/snixon	2/18/2025	32.8	%			
Percent Volatile Solids	SM 2540G - 2015	lfalck/snixon	2/18/2025	54.61	%			
Total Solids	Contract Lab	EurofinsLancaster	2/17/2025	33	%	0.50		
Daily 2								
pH	SW846 9045D	gverbene	2/12/2025	12.31	s.u.			
Extractable Organics								

Printed Date
Tuesday, April 1, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-06 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
8270 BNA	Contract Lab	EurofinsPittsburgh	2/20/2025	See attached Report	ug/Kg Dry	2900		
Pesticides	Contract Lab	EurofinsPittsburgh	2/21/2025	See attached report	ug/Kg Dry	25		
Metals								
Antimony	Contract Lab	EurofinsLancaster	2/24/2025	<14	mg/Dry Kg	14		
Arsenic	Contract Lab	EurofinsLancaster	2/24/2025	<14	mg/Dry Kg	14		
Barium	Contract Lab	EurofinsLancaster	2/24/2025	330	mg/Dry Kg	1.4		
Beryllium	Contract Lab	EurofinsLancaster	2/24/2025	<1.4	mg/Dry Kg	1.4		
Boron	Contract Lab	EurofinsLancaster	2/24/2025	<57	mg/Dry Kg	57		
Cadmium	Contract Lab	EurofinsLancaster	2/24/2025	<1.4	mg/Dry Kg	1.4		
Chromium	Contract Lab	EurofinsLancaster	2/24/2025	30	mg/Dry Kg	4.3		
Copper	Contract Lab	EurofinsLancaster	2/24/2025	180	mg/Dry Kg	5.7		
Lead	Contract Lab	EurofinsLancaster	2/24/2025	38	mg/Dry Kg	4.3		
Mercury, Total	Contract Lab	EurofinsLancaster	2/24/2025	0.38	mg/Dry Kg	0.17		
Molybdenum	Contract Lab	EurofinsLancaster	2/24/2025	5.3	mg/Dry Kg	2.8		
Nickel	Contract Lab	EurofinsLancaster	2/24/2025	18	mg/Dry Kg	2.8		
Selenium	Contract Lab	EurofinsLancaster	2/24/2025	<14	mg/Dry Kg	14		

Printed Date
Tuesday, April 1, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-06 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Silver	Contract Lab	EurofinsLancaster	2/24/2025	<2.8	mg/Dry Kg	2.8		
Sodium	Contract Lab	EurofinsLancaster	2/24/2025	760	mg/Dry Kg	280		
Zinc	Contract Lab	EurofinsLancaster	2/24/2025	430	mg/Dry Kg	5.7		
TCLP								
Aluminum	Contract Lab	EurofinsLancaster	2/26/2025	1.0	mg/L	0.25		
Antimony	Contract Lab	EurofinsLancaster	2/26/2025	<0.010	mg/L	0.010		
Arsenic	Contract Lab	EurofinsLancaster	2/26/2025	<0.020	mg/L	0.020		
Barium	Contract Lab	EurofinsLancaster	2/26/2025	0.55	mg/L	0.020		
Boron	Contract Lab	EurofinsLancaster	2/26/2025	<0.50	mg/L	0.50		
Cadmium	Contract Lab	EurofinsLancaster	2/26/2025	<0.0050	mg/L	0.0050		
Chromium	Contract Lab	EurofinsLancaster	2/26/2025	<0.020	mg/L	0.020		
Copper	Contract Lab	EurofinsLancaster	2/26/2025	0.51	mg/L	0.010	B	Analyte was found in the blank
Lead	Contract Lab	EurofinsLancaster	2/26/2025	0.014	mg/L	0.0050	B	Analyte was found in the blank
Mercury	Contract Lab	EurofinsLancaster	2/26/2025	<0.00020	mg/L	0.00020		
Molybdenum	Contract Lab	EurofinsLancaster	2/26/2025	0.0098	mg/L	0.0050		
Nickel	Contract Lab	EurofinsLancaster	2/26/2025	0.10	mg/L	0.010		

Printed Date
Tuesday, April 1, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-06 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Selenium	Contract Lab	EurofinsLancaster	2/26/2025	<0.010	mg/L	0.010		
Silver	Contract Lab	EurofinsLancaster	2/26/2025	<0.0050	mg/L	0.0050		
Zinc	Contract Lab	EurofinsLancaster	2/26/2025	2.1	mg/L	0.10		
608 Pesticides	Contract Lab	EurofinsPittsburgh	2/21/2025	See Attached	mg/L	0.00050		
Chloradane	Contract Lab	EurofinsPittsburgh	2/21/2025	<0.0050	mg/L	0.0050		
Toxaphene	Contract Lab	EurofinsPittsburgh	2/21/2025	<0.040	mg/L	0.040		
TCLP BNA	Contract Lab	EurofinsPittsburgh	2/19/2025	See attached report	mg/L	0.050		
TCLP Volatile Organics	Contract Lab	EurofinsLancaster	2/26/2025	See Attached	mg/L	0.050		
Herbicides	Contract Lab	EurofinsPittsburgh	2/21/2025	See attached report	mg/L	0.010		

Printed Date
Tuesday, April 1, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-06 **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
B	Similar concentration found in field/method blank

Comments:

2/6,2/9,2/10,2/11,2/12

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

"ALCOSAN Laboratory reported SW846 9045D pH results are corrected to 25 deg. C using a temperature correction calculation"

Released by:

Larissa Haver 4-1-25

Date

Printed Date
Tuesday, April 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-06A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	3/5/2025	35	%	0.50	H H3	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements. Sample was received and analyzed past holding time. This does not meet regulatory requirements.
Metals								
Mercury, Total	Contract Lab	EurofinsLancaster	3/7/2025	0.31	mg/Dry Kg	0.16		Sample was inadvertently run twice by Contract Lab. Total solids was also run on sample to calculate dry weight result.

Printed Date
Tuesday, April 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-06A **Sample Type:** COMPOSITE

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

2/6,2/9,2/10,2/11,2/12

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hawk

4-1-25

Date

Printed Date
Tuesday, April 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-07 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Phenolics, Total	Contract Lab	EurofinsPittsburgh	2/19/2025	3.1	mg/Dry Kg	0.66		
Contract Lab								
2,3,7,8-TCDD	Contract Lab	EurofinsLancaster	3/4/2025	<3.3	pg/g Dry	3.3		
PCBs	Contract Lab	EurofinsPittsburgh	2/18/2025	See attached report	ug/Kg Dry	55		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	2/17/2025	30	%	0.50		

Printed Date
Tuesday, April 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-07 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

2/6,2/9,2/10,2/11,2/12

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hawk

4-1-25

Date

Printed Date
Tuesday, April 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-08 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
Hexane Extractable Material	Contract Lab	EurofinsPittsburgh	2/20/2025	<5.0	mg/L	5.0		
Chemistry								
Hexane Extractable Material	Contract Lab	EurofinsPittsburgh	2/21/2025	7500	mg/Dry Kg	530		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	2/21/2025	31	%	0.50	H,H3	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements. Sample was received and analyzed past holding time. This does not meet regulatory requirements.

Printed Date
Tuesday, April 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-08 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

2/6,2/9,2/10,2/11,2/12

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by: Larissa Hoover

4-1-25

Date

Printed Date
Tuesday, April 1, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250212015 **Sample Date:** 2/12/2025

Sample ID Number: 250212015-09 **Sample Type:** GRAB

Customer Sample Number:

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	2/17/2025	35	%	0.50		
Volatile Organics								
Volatile Organics	Contract Lab	EurofinsLancaster	2/26/2025	See attached report	ug/Kg Dry	1900		

Data Qualifier **Data Qualifier Description**

Comments:

2/6,2/9,2/10,2/11,2/12

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by: Larissa Hovel

4-1-25

Date

Printed Date
Tuesday, April 1, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 4/1/2025 3:02:03 PM Revision 1

JOB DESCRIPTION

Mercury

JOB NUMBER

180-187204-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
4/1/2025 3:02:03 PM
Revision 1

Authorized for release by
Shall Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 14
QC Sample Results 38
QC Association Summary 40
Chain of Custody 42
Receipt Checklists 51

Job Narrative
180-187204-1

040125 Revised report to correct sample ID 250311015-06 to 250212015-06 and add A to the end of four other samples at client request. This report replaces the report previously issued on 031225

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/4/2025 11:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

Receipt Exceptions
The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): 250213018-01 (180-187204-11) and 250214017-01 (180-187204-16). The container labels list 2/13/25 and 2/14/25, while the COC lists 2/12/25 and 2/13/25. The client was contacted and the date on the COC is correct.

Client was contacted and lab is ok to proceed with less than 5g for solids and to run the solids out of hold time.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 2540G: Limited sample volume available. Less than 5g was used for the analysis. Total Solids 250211013-08 (180-187204-12) and (180-187204-B-12 DU)

Method 2540G: The following samples were received outside of holding time: 250211013-08 (180-187204-12), 250211014-08 (180-187204-13), 250211015-08 (180-187204-14), 250211015-06 (180-187204-15) and (180-187204-B-12 DU).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Qualifiers

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	03-12-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-187204-1	250218018-07	Water	02/18/25 12:00	03/04/25 11:15
180-187204-2	250218018-08	Water	02/18/25 14:24	03/04/25 11:15
180-187204-3	250219021-01	Water	02/19/25 10:00	03/04/25 11:15
180-187204-4	250219021-07	Water	02/19/25 12:00	03/04/25 11:15
180-187204-5	250219021-08	Water	02/19/25 13:45	03/04/25 11:15
180-187204-6	250221017-01	Water	02/21/25 09:15	03/04/25 11:15
180-187204-7	250221017-07	Water	02/21/25 11:15	03/04/25 11:15
180-187204-8	250221017-08	Water	02/21/25 13:48	03/04/25 11:15
180-187204-9	250224013-01	Water	02/24/25 08:50	03/04/25 11:15
180-187204-10	250224014-01	Water	02/24/25 09:00	03/04/25 11:15
180-187204-11	250213018-01	Water	02/12/25 23:59	03/04/25 11:15
180-187204-12	250211013-08A	Solid	02/11/25 06:07	03/04/25 11:15
180-187204-13	250211014-08A	Solid	02/11/25 06:15	03/04/25 11:15
180-187204-14	250211015-08A	Solid	02/11/25 06:22	03/04/25 11:15
180-187204-15	250212015-08A	Solid	02/12/25 06:20	03/04/25 11:15
180-187204-16	250214017-01	Water	02/13/25 23:59	03/04/25 11:15
180-187204-17	250218013-01	Water	02/18/25 09:15	03/04/25 11:15
180-187204-18	250218017-07	Water	02/18/25 12:00	03/04/25 11:15
180-187204-19	250218017-08	Water	02/18/25 14:48	03/04/25 11:15
180-187204-20	250218018-01	Water	02/18/25 10:00	03/04/25 11:15

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Method	Method Description	Protocol	Laboratory
245.1	Mercury (CVAA)	EPA	ELLE
7471B	Mercury (CVAA)	SW846	ELLE
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
245.1	Preparation, Mercury	EPA	ELLE
7471B	Preparation, Mercury	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250218018-07 — Lab Sample ID: 180-187204-1

Date Collected: 02/18/25 12:00 — **Matrix: Water**
Date Received: 03/04/25 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 17:50	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250218018-08 — Lab Sample ID: 180-187204-2

Date Collected: 02/18/25 14:24 — **Matrix: Water**
Date Received: 03/04/25 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 17:51	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250219021-01 — Lab Sample ID: 180-187204-3

Date Collected: 02/19/25 10:00 — **Matrix: Water**
Date Received: 03/04/25 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 17:53	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250219021-07 — Lab Sample ID: 180-187204-4

Date Collected: 02/19/25 12:00 — **Matrix: Water**
Date Received: 03/04/25 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 17:59	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250219021-08 — Lab Sample ID: 180-187204-5

Date Collected: 02/19/25 13:45 — **Matrix: Water**
Date Received: 03/04/25 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 18:01	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250221017-01
Date Collected: 02/21/25 09:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 18:03	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250221017-07
Date Collected: 02/21/25 11:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 18:05	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250221017-08
Date Collected: 02/21/25 13:48
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 18:07	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250224013-01
Date Collected: 02/24/25 08:50
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 17:44	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250224014-01
Date Collected: 02/24/25 09:00
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613990	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 18:09	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250213018-01
Date Collected: 02/12/25 23:59
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613994	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 16:15	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250211013-08A
Date Collected: 02/11/25 06:07
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			491387	03/05/25 14:41	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250211013-08A
Date Collected: 02/11/25 06:07
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-12
Matrix: Solid
Percent Solids: 66.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.60 g	100 mL	614013	03/06/25 23:35	UAMX	ELLE
Total/NA	Analysis	7471B		1			614503	03/07/25 19:28	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250211014-08A
Date Collected: 02/11/25 06:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			491387	03/05/25 14:41	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250211014-08A
Date Collected: 02/11/25 06:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-13
Matrix: Solid
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.60 g	100 mL	614013	03/06/25 23:35	UAMX	ELLE
Total/NA	Analysis	7471B		1			614503	03/07/25 19:30	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250211015-08A
Date Collected: 02/11/25 06:22
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			491387	03/05/25 14:41	LWM	EET PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250211015-08A
Date Collected: 02/11/25 06:22
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-14
Matrix: Solid
Percent Solids: 13.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.62 g	100 mL	614013	03/06/25 23:35	UAMX	ELLE
Total/NA	Analysis	7471B		1			614503	03/07/25 19:26	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250212015-06A
Date Collected: 02/12/25 06:20
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			491387	03/05/25 14:41	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250212015-06A
Date Collected: 02/12/25 06:20
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-15
Matrix: Solid
Percent Solids: 35.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			0.62 g	100 mL	614013	03/06/25 23:35	UAMX	ELLE
Total/NA	Analysis	7471B		1			614503	03/07/25 19:35	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250214017-01
Date Collected: 02/13/25 23:59
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613994	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 16:17	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250218013-01
Date Collected: 02/18/25 09:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613994	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 16:19	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250218017-07
Date Collected: 02/18/25 12:00
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613994	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 16:20	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250218017-08

Lab Sample ID: 180-187204-19

Date Collected: 02/18/25 14:48
Matrix: Water
Date Received: 03/04/25 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613994	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 16:22	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Client Sample ID: 250218018-01

Lab Sample ID: 180-187204-20

Date Collected: 02/18/25 10:00
Matrix: Water
Date Received: 03/04/25 11:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	245.1			20 mL	20 mL	613994	03/06/25 23:05	UAMX	ELLE
Total/NA	Analysis	245.1		1			614453	03/07/25 16:28	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Analysis
  - LWM = Leslie McIntire

Lab: ELLE
- Batch Type: Prep
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - IJ3I = Elizabeth Brittingham

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250218018-07
Date Collected: 02/18/25 12:00
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-1
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 17:50	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250218018-08
Date Collected: 02/18/25 14:24
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-2
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 17:51	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250219021-01
Date Collected: 02/19/25 10:00
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-3
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 17:53	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250219021-07
Date Collected: 02/19/25 12:00
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-4
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 17:59	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250219021-08
Date Collected: 02/19/25 13:45
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-5
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 18:01	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250221017-01
Date Collected: 02/21/25 09:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-6
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 18:03	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250221017-07
Date Collected: 02/21/25 11:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-7
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 18:05	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250221017-08
Date Collected: 02/21/25 13:48
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-8
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 18:07	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250224013-01
Date Collected: 02/24/25 08:50
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-9
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 17:44	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250224014-01
Date Collected: 02/24/25 09:00
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-10
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 18:09	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250213018-01
Date Collected: 02/12/25 23:59
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-11
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20		ug/L		03/06/25 23:05	03/07/25 16:15	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250211013-08A
Date Collected: 02/11/25 06:07
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-12
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	67	H H3	0.50		%			03/05/25 14:41	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250211013-08A
Date Collected: 02/11/25 06:07
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-12
Matrix: Solid
Percent Solids: 66.8

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.090		mg/Kg	☼	03/06/25 23:35	03/07/25 19:28	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250211014-08A
Date Collected: 02/11/25 06:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-13
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	89	H H3	0.50		%			03/05/25 14:41	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250211014-08A
Date Collected: 02/11/25 06:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-13
Matrix: Solid
Percent Solids: 88.7

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.094**		0.068		mg/Kg	☼	03/06/25 23:35	03/07/25 19:30	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250211015-08A
Date Collected: 02/11/25 06:22
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-14
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	13	H H3	0.50		%			03/05/25 14:41	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250211015-08A
Date Collected: 02/11/25 06:22
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-14
Matrix: Solid
Percent Solids: 13.0

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.45		mg/Kg	☼	03/06/25 23:35	03/07/25 19:26	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250212015-06A
Date Collected: 02/12/25 06:20
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-15
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	35	H H3	0.50		%			03/05/25 14:41	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250212015-06A
Date Collected: 02/12/25 06:20
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-15
Matrix: Solid
Percent Solids: 35.2

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.31		0.16		mg/Kg	☼	03/06/25 23:35	03/07/25 19:35	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250214017-01
Date Collected: 02/13/25 23:59
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-16
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20		ug/L		03/06/25 23:05	03/07/25 16:17	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250218013-01
Date Collected: 02/18/25 09:15
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-17
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20		ug/L		03/06/25 23:05	03/07/25 16:19	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250218017-07
Date Collected: 02/18/25 12:00
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-18
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20		ug/L		03/06/25 23:05	03/07/25 16:20	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250218017-08
Date Collected: 02/18/25 14:48
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-19
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20		ug/L		03/06/25 23:05	03/07/25 16:22	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Client Sample ID: 250218018-01
Date Collected: 02/18/25 10:00
Date Received: 03/04/25 11:15

Lab Sample ID: 180-187204-20
Matrix: Water

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+	0.20		ug/L		03/06/25 23:05	03/07/25 16:28	1

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 410-613990/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 614453 — **Prep Batch: 613990**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 17:40	1

Lab Sample ID: LCS 410-613990/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 614453 — **Prep Batch: 613990**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.14		ug/L		114	85 - 115

Lab Sample ID: 180-187204-9 MS — **Client Sample ID: 250224013-01**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 614453 — **Prep Batch: 613990**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.14		ug/L		114	80 - 120

Lab Sample ID: 180-187204-9 DU — **Client Sample ID: 250224013-01**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 614453 — **Prep Batch: 613990**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		ug/L		NC	20

Lab Sample ID: MB 410-613994/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 614453 — **Prep Batch: 613994**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20		ug/L		03/06/25 23:05	03/07/25 16:05	1

Lab Sample ID: LCS 410-613994/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 614453 — **Prep Batch: 613994**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.17	*+	ug/L		117	85 - 115

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-614013/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 614503 — **Prep Batch: 614013**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		03/06/25 23:35	03/07/25 18:50	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 410-614013/2-A
Matrix: Solid
Analysis Batch: 614503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 614013

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.181		mg/Kg		109	80 - 120

Lab Sample ID: 410-208966-B-13-M MS
Matrix: Solid
Analysis Batch: 614503

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 614013

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.176	0.183		mg/Kg	☼	104	80 - 120

Lab Sample ID: 410-208966-B-13-N MSD
Matrix: Solid
Analysis Batch: 614503

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 614013

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.179	0.207		mg/Kg	☼	116	80 - 120	13	20

Lab Sample ID: 410-208966-B-13-L DU
Matrix: Solid
Analysis Batch: 614503

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 614013

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-187204-12 DU
Matrix: Solid
Analysis Batch: 491387

Client Sample ID: 250211013-08A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	67	H H3	68.4		%		2	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Metals

Prep Batch: 613990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187204-1	250218018-07	Total/NA	Water	245.1	
180-187204-2	250218018-08	Total/NA	Water	245.1	
180-187204-3	250219021-01	Total/NA	Water	245.1	
180-187204-4	250219021-07	Total/NA	Water	245.1	
180-187204-5	250219021-08	Total/NA	Water	245.1	
180-187204-6	250221017-01	Total/NA	Water	245.1	
180-187204-7	250221017-07	Total/NA	Water	245.1	
180-187204-8	250221017-08	Total/NA	Water	245.1	
180-187204-9	250224013-01	Total/NA	Water	245.1	
180-187204-10	250224014-01	Total/NA	Water	245.1	
MB 410-613990/1-A	Method Blank	Total/NA	Water	245.1	
LCS 410-613990/2-A	Lab Control Sample	Total/NA	Water	245.1	
180-187204-9 MS	250224013-01	Total/NA	Water	245.1	
180-187204-9 DU	250224013-01	Total/NA	Water	245.1	

Prep Batch: 613994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187204-11	250213018-01	Total/NA	Water	245.1	
180-187204-16	250214017-01	Total/NA	Water	245.1	
180-187204-17	250218013-01	Total/NA	Water	245.1	
180-187204-18	250218017-07	Total/NA	Water	245.1	
180-187204-19	250218017-08	Total/NA	Water	245.1	
180-187204-20	250218018-01	Total/NA	Water	245.1	
MB 410-613994/1-A	Method Blank	Total/NA	Water	245.1	
LCS 410-613994/2-A	Lab Control Sample	Total/NA	Water	245.1	

Prep Batch: 614013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187204-12	250211013-08A	Total/NA	Solid	7471B	
180-187204-13	250211014-08A	Total/NA	Solid	7471B	
180-187204-14	250211015-08A	Total/NA	Solid	7471B	
180-187204-15	250212015-06A	Total/NA	Solid	7471B	
MB 410-614013/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-614013/2-A	Lab Control Sample	Total/NA	Solid	7471B	
410-208966-B-13-M MS	Matrix Spike	Total/NA	Solid	7471B	
410-208966-B-13-N MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
410-208966-B-13-L DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 614453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187204-1	250218018-07	Total/NA	Water	245.1	613990
180-187204-2	250218018-08	Total/NA	Water	245.1	613990
180-187204-3	250219021-01	Total/NA	Water	245.1	613990
180-187204-4	250219021-07	Total/NA	Water	245.1	613990
180-187204-5	250219021-08	Total/NA	Water	245.1	613990
180-187204-6	250221017-01	Total/NA	Water	245.1	613990
180-187204-7	250221017-07	Total/NA	Water	245.1	613990
180-187204-8	250221017-08	Total/NA	Water	245.1	613990
180-187204-9	250224013-01	Total/NA	Water	245.1	613990
180-187204-10	250224014-01	Total/NA	Water	245.1	613990
180-187204-11	250213018-01	Total/NA	Water	245.1	613994

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Mercury

Job ID: 180-187204-1

Metals (Continued)

Analysis Batch: 614453 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187204-16	250214017-01	Total/NA	Water	245.1	613994
180-187204-17	250218013-01	Total/NA	Water	245.1	613994
180-187204-18	250218017-07	Total/NA	Water	245.1	613994
180-187204-19	250218017-08	Total/NA	Water	245.1	613994
180-187204-20	250218018-01	Total/NA	Water	245.1	613994
MB 410-613990/1-A	Method Blank	Total/NA	Water	245.1	613990
MB 410-613994/1-A	Method Blank	Total/NA	Water	245.1	613994
LCS 410-613990/2-A	Lab Control Sample	Total/NA	Water	245.1	613990
LCS 410-613994/2-A	Lab Control Sample	Total/NA	Water	245.1	613994
180-187204-9 MS	250224013-01	Total/NA	Water	245.1	613990
180-187204-9 DU	250224013-01	Total/NA	Water	245.1	613990

Analysis Batch: 614503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187204-12	250211013-08A	Total/NA	Solid	7471B	614013
180-187204-13	250211014-08A	Total/NA	Solid	7471B	614013
180-187204-14	250211015-08A	Total/NA	Solid	7471B	614013
180-187204-15	250212015-06A	Total/NA	Solid	7471B	614013
MB 410-614013/1-A	Method Blank	Total/NA	Solid	7471B	614013
LCS 410-614013/2-A	Lab Control Sample	Total/NA	Solid	7471B	614013
410-208966-B-13-M MS	Matrix Spike	Total/NA	Solid	7471B	614013
410-208966-B-13-N MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	614013
410-208966-B-13-L DU	Duplicate	Total/NA	Solid	7471B	614013

General Chemistry

Analysis Batch: 491387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-187204-12	250211013-08A	Total/NA	Solid	SM 2540G	
180-187204-13	250211014-08A	Total/NA	Solid	SM 2540G	
180-187204-14	250211015-08A	Total/NA	Solid	SM 2540G	
180-187204-15	250212015-06A	Total/NA	Solid	SM 2540G	
180-187204-12 DU	250211013-08A	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **See below**

Additional Information : ** 5 day rush**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Mercury					
							Number of Containers					
250218018-07	2/18/25	1200	Aq	Y (HNO3)	C	UPMC Presby	1					
250218018-08	2/18/25	1424	Aq	Y (HNO3)	G	UPMC Presby MB	1					
250219021-01	2/19/25	1000	Aq	Y (HNO3)	G	UPMC Presby EB	1					
250219021-07	2/19/25	1200	Aq	Y (HNO3)	C	UPMC Presby	1					
250219021-08	2/19/25	1345	Aq	Y (HNO3)	G	UPMC Presby MB	1					
250221017-01	2/21/25	0915	Aq	Y (HNO3)	G	UPMC Shadyside EB	1					
250221017-07	2/21/25	1115	Aq	Y (HNO3)	C	UPMC Shadyside	1					
250221017-08	2/21/25	1348	Aq	Y (HNO3)	G	UPMC Shadyside MB	1					
250224013-01	2/24/25	0850	Aq	Y (HNO3)	G	PIPP EB	1					
250224014-01	2/24/25	0900	Aq	Y (HNO3)	G	FENEPP EB	1					

Tests to be Performed

180-187204 Chain of Custody

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	ALCOSAN	3/4/25	0030	[illegible]	Eurofins Pgh	3-4-25	9:30
[illegible]	EPHNE	3-4-25	11:15	[illegible]	EPHNE	3-4-25	1115
	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: [illegible] Date: 3/4/25

Supervisor Review: Initials: [illegible] Date: 3-4-25

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **See below**

Additional Information : ** 5 day rush**

Tests to be Performed: Mercury

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers					
250213018-01	2/12/25	2359	Aq	Y (HNO3)	C	UPMC East	1					
250211013-08	2/11/25	0607	S	N	C	Quarterly Ash	1					
250211014-08	2/11/25	0615	S	N	C	Quarterly Grit	1					
250211015-08	2/11/25	0622	S	N	C	Quarterly Scum	1					
250212015-06	2/12/25	0620	S	N	C	Quarterly Limed Sludge	1					
250214017-01	2/13/25	2359	Aq	Y (HNO3)	C	UPMC Shadyside	1					
250218013-01	2/18/25	0915	Aq	Y (HNO3)	G	UPMC Mercy EB	1					
250218017-07	2/18/25	1200	Aq	Y (HNO3)	C	Universal Stainless	1					
250218017-08	2/18/25	1448	Aq	Y (HNO3)	G	Universal Stainless MB	1					
250218018-01	2/18/25	1000	Aq	Y (HNO3)	G	UPMC Presby EB	1					

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	2/4/25	0920	[signature]	Eurofins Pgh	3-4-25	9:30
[signature]	EPHNE	3-4-25	11:15	[signature]	EPHNE	3-4-25	1115

COC Analyst Cooler Review: Initials: YH Date: 3/4/25

Supervisor Review: Initials: [initials] Date: 3-4-25

Alcosan -0.6 # 25

J7 1.9 - 0.6 → 1.3

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **See below**

Additional Information : ** 5 day rush**

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: Mercury					
							Number of Containers					
250213018-01	2/12/25	2359	Aq	Y (HNO3)	C	UPMC East	1					
250211013-08 A	2/11/25	0607	S	N	C	Quarterly Ash	1					
250211014-08 A	2/11/25	0615	S	N	C	Quarterly Grit	1					
250211015-08 A	2/11/25	0622	S	N	C	Quarterly Scum	1					
250212015-06 A	2/12/25	0620	S	N	C	Quarterly Limed Sludge	1					
250214017-01	2/13/25	2359	Aq	Y (HNO3)	C	UPMC Shadyside	1					
250218013-01	2/18/25	0915	Aq	Y (HNO3)	G	UPMC Mercy EB	1					
250218017-07	2/18/25	1200	Aq	Y (HNO3)	C	Universal Stainless	1					
250218017-08	2/18/25	1448	Aq	Y (HNO3)	G	Universal Stainless MB	1					
250218018-01	2/18/25	1000	Aq	Y (HNO3)	G	UPMC Presby EB	1					

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	2/21/25	0800	[signature]	Eurofins Pgh	3-4-25	4:30
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: TH Date: 3/4/25

Supervisor Review: Initials: [illegible] Date: 3-4-25

A – corrected per MGT 4/1/25 TH

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-534261.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-187204-1
Address: 2425 New Holland Pike,	Due Date Requested: 3/10/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Mercury	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	7471B/7471B_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
250211013-08 (180-187204-12)	2/11/25	06:07 Eastern	G	Solid			X	1	
250211014-08 (180-187204-13)	2/11/25	06:15 Eastern	G	Solid			X	1	
250211015-08 (180-187204-14)	2/11/25	06:22 Eastern	G	Solid			X	1	
250211015-06 (180-187204-15)	2/12/25	06:20 Eastern	G	Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/5/25	ERGNE	[signature]	3/5/25 1415	ELLE
[signature]	3/5/25 1850	ELLE			
			[signature]	3/5/25 1850	[illegible]

Custody Seals Intact: ☒ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R 2.4 C 2.1

Ver: 10/10/2024

4/1/2025 (Rev. 1)

ICOC No:
180-534261

Containers

Count	Container Type	Preservative
4	Soil Jar 8oz Amber	None

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shall	Carrier Tracking No(s): N/A	COC No: 180-534254.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shall.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 2
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-187204-1
Address: 2425 New Holland Pike,	Due Date Requested: 3/10/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Mercury	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep Mercury (CVAA)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
250218018-07 (180-187204-1)	2/18/25	12:00 Eastern	G	Water			X	1	
250218018-08 (180-187204-2)	2/18/25	14:24 Eastern	G	Water			X	1	
250219021-01 (180-187204-3)	2/19/25	10:00 Eastern	G	Water			X	1	
250219021-07 (180-187204-4)	2/19/25	12:00 Eastern	G	Water			X	1	
250219021-08 (180-187204-5)	2/19/25	13:45 Eastern	G	Water			X	1	
250221017-01 (180-187204-6)	2/21/25	09:15 Eastern	G	Water			X	1	
250221017-07 (180-187204-7)	2/21/25	11:15 Eastern	G	Water			X	1	
250221017-08 (180-187204-8)	2/21/25	13:48 Eastern	G	Water			X	1	
250224013-01 (180-187204-9)	2/24/25	08:50 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) | Primary Deliverable Rank: 2 | Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	3/5/25	EBHNE	[signature]	3/5/25 1415	ELLE
[signature]	3/5/25 1850	ELLE			
			[signature]	3/5/25 1850	[illegible]

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
☑ Yes △ No		R 3.5 C 3.2

Ver: 10/10/2024

4/1/2025 (Rev. 1)

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-534254.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 2 of 2
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-187204-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/10/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Mercury	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil, Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	245.1/245.1_Prep Mercury (CVAA)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
250224014-01 (180-187204-10)	2/24/25	09:00 Eastern	G	Water			X	1	
250213016-01 (180-187204-11)	2/12/25	23:59 Eastern	G	Water			X	1	
250214017-01 (180-187204-16)	2/13/25	23:59 Eastern	G	Water			X	1	
250218013-01 (180-187204-17)	2/18/25	09:15 Eastern	G	Water			X	1	
250218017-07 (180-187204-18)	2/18/25	12:00 Eastern	G	Water			X	1	
250218017-08 (180-187204-19)	2/18/25	14:48 Eastern	G	Water			X	1	
250218018-01 (180-187204-20)	2/18/25	10:00 Eastern	G	Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 3/5/25	Company: ECLE	Received by:	Date/Time: 3/5/25 1445	Company: ECLE
Relinquished by:	Date/Time: 3/5/25 1850	Company: ECLE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 3/5/25 1850	Company: ECLE

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R 3.5 C 3.2

Ver: 10/10/2024

4/1/2025 (Rev. 1)

ICOC No:
180-534254

Containers

Count	Container Type	Preservative
16	Other Client Container - HNO3	Nitric Acid

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-187204-1

Login Number: 187204
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-187204-1

Login Number: 187204
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 03/05/25 08:32 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 2/24/2025 5:05:36 PM

JOB DESCRIPTION

Quarterly Limed Sludge
250212015

JOB NUMBER

180-186751-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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2/24/2025 5:05:36 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 12
Chain of Custody 13
Receipt Checklists 14

Job Narrative
180-186751-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 2/19/2025 2:42 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.7°C and 2.3°C.

Receipt Exceptions
The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 250211015-10 (180-186751-1). The container label ID lists 250211015-10, while the COC ID lists 250212015-08. The client was contacted, and the lab was instructed to use the ID on the chain of custody.

General Chemistry
Method 2540G: The following sample was received outside of holding time: 250212015-08 (180-186751-1). Total Solids The client was contacted and the lab was instructed to proceed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186751-1
SDG: 250212015

Qualifiers

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
H3	Sample was received and analyzed past holding time. This does not meet regulatory requirements.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186751-1
SDG: 250212015

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186751-1
SDG: 250212015

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-186751-1	250212015-08	Solid	02/12/25 06:20	02/19/25 14:42

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186751-1
SDG: 250212015

Method	Method Description	Protocol	Laboratory
EPA 9071B	HEM and SGT-HEM	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
9071B	Preparation, HEM and SGT-HEM	SW846	EET PIT

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186751-1
SDG: 250212015

Client Sample ID: 250212015-08

Date Collected: 02/12/25 06:20
Date Received: 02/19/25 14:42

Lab Sample ID: 180-186751-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			490740	02/21/25 11:08	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250212015-08

Date Collected: 02/12/25 06:20
Date Received: 02/19/25 14:42

Lab Sample ID: 180-186751-1
Matrix: Solid
Percent Solids: 31.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9071B			30.0 g	30.0 g	490712	02/21/25 06:42	MKK	EET PIT
Total/NA	Analysis	EPA 9071B		1			490737	02/21/25 10:33	A1K	EET PIT
	Instrument ID: NOEQUIP									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT
- Batch Type: Prep
  - MKK = Mary Kenny
- Batch Type: Analysis
  - A1K = Agnes Komlos
  - LWM = Leslie McIntire

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186751-1
SDG: 250212015

Client Sample ID: 250212015-08
Date Collected: 02/12/25 06:20
Date Received: 02/19/25 14:42

Lab Sample ID: 180-186751-1
Matrix: Solid
Percent Solids: 31.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (SW846 EPA 9071B)	7500		530		mg/Kg	☼	02/21/25 06:42	02/21/25 10:33	1
Total Solids (SM 2540G)	31	H H3	0.50		%			02/21/25 11:08	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186751-1
SDG: 250212015

Method: EPA 9071B - HEM and SGT-HEM

Lab Sample ID: MB 180-490712/1-A
Matrix: Solid
Analysis Batch: 490737

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		170		mg/Kg		02/21/25 06:42	02/21/25 10:33	1

Lab Sample ID: LCS 180-490712/2-A
Matrix: Solid
Analysis Batch: 490737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490712

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
HEM			1330	1080		mg/Kg		81	78 - 114		

Lab Sample ID: LCSD 180-490712/3-A
Matrix: Solid
Analysis Batch: 490737

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 490712

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM			1330	1170		mg/Kg		88	78 - 114	9	18

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-186751-1 DU
Matrix: Solid
Analysis Batch: 490740

Client Sample ID: 250212015-08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	31	H H3		30.3		%				3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186751-1
SDG: 250212015

General Chemistry

Prep Batch: 490712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186751-1	250212015-08	Total/NA	Solid	9071B	
MB 180-490712/1-A	Method Blank	Total/NA	Solid	9071B	
LCS 180-490712/2-A	Lab Control Sample	Total/NA	Solid	9071B	
LCSD 180-490712/3-A	Lab Control Sample Dup	Total/NA	Solid	9071B	

Analysis Batch: 490737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186751-1	250212015-08	Total/NA	Solid	EPA 9071B	490712
MB 180-490712/1-A	Method Blank	Total/NA	Solid	EPA 9071B	490712
LCS 180-490712/2-A	Lab Control Sample	Total/NA	Solid	EPA 9071B	490712
LCSD 180-490712/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 9071B	490712

Analysis Batch: 490740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186751-1	250212015-08	Total/NA	Solid	SM 2540G	
180-186751-1 DU	250212015-08	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250212015**

Additional Information : Quarterly Limed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: %total solids					
							Number of Containers					
250212015-08	2/12/25	0620	S	N	G	Always maintain sample/extract at 25°C when reading any pH result. Solids must be analyzed by 2540G. All methods must be accredited by PADEP or NELAC. Email a copy of LIMS login with signed COC as soon as possible after receipt. Report Level II data package. Document ASTM Extraction date/time And out of hold extraction on report.	1					

180-186751 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	ALCOSAN	2/19/25	1020	[illegible]	EUROFINS PGH	2-19-25	1020
[illegible]	EPITNE	2-19-25	1442	[illegible]	EPITNE	2/19/25	1442
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: JH Date: 2/19/25

Supervisor Review: Initials: SJ Date: 2/18-25

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-186751-1
SDG Number: 250212015

Login Number: 186751
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 3/14/2025 12:29:59 PM

JOB DESCRIPTION

Quarterly Limed Sludge
250212015

JOB NUMBER

180-186617-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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3/14/2025 12:29:59 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 7
Certification Summary 9
Sample Summary 10
Method Summary 11
Lab Chronicle 13
Client Sample Results 18
QC Sample Results 29
QC Association Summary 67
Chain of Custody 77
Receipt Checklists 80

Job Narrative
180-186617-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/14/2025 1:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.2°C, 1.3°C and 2.8°C.

Comments
The following is the pH to an additional decimal place for 9040C/ASTM: 12.01

The following test was analyzed on a water following ASTM Leach of the sludge. The lab is certified for this method in Non-Potable Water - SM2540E

9071 grab there is insufficient sample for analysis and was recollected

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 410-610252 recovered above the upper control limit for Methyl Ethyl Ketone, 2-Hexanone, methyl isobutyl ketone, Acetone, Bromomethane and Chloroethane. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D: The following sample was diluted due to the nature of the sample matrix: 250212015-09 (180-186617-4). Elevated reporting limits (RLs) are provided.

Method 8260D - TCLP: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: 250212015-06 (180-186617-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) analyzed in 180-490645 was outside the method criteria for the following analyte: Di-n-octyl phthalate. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-490598 and analytical batch 180-490645 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8270E: Surrogate recovery for the following samples were outside control limits: 250212015-06 (180-186617-1), (180-186617-B-1-A MS) and (180-186617-B-1-B MSD). Evidence of matrix interference is present and the sample, MS and MSD confirm; therefore, re-extraction and/or re-analysis was not performed.

Method 8270E - TCLP: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 180-490418 and 180-490551.

Method 8270E - TCLP: The continuing calibration verification (CCV) analyzed in 180-490590 was outside the method criteria for the following analyte: 2,4,6-Tribromophenol (Surr). As indicated in the reference method, sample analysis may proceed; however,

any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
Method 8151A: The continuing calibration verification (CCV) associated with batch 180-490615 recovered above the upper control limit for silvex and surrogate DCAA. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8151A - TCLP: The continuing calibration verification (CCV) associated with batch 180-490719 recovered above the upper control limit for all analytes of interest. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
Method 8082A: Surrogate TCMX recovered slightly low but DCB passed. Results reported as is. (180-186503-A-141-B MSD)

Method 8082A: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 180-490393 and analytical batch 180-490461 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-490453 and analytical batch 180-490727 were outside control limits for Endrin Aldehyde. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8081B: The following sample was diluted due to the nature of the sample matrix: 250212015-06 (180-186617-1). Elevated reporting limits (RLs) are provided.

Method 8081B - TCLP: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 180-490418 and 180-490554.

Method 8081B - TCLP: Surrogate DCB recovery for the following sample was outside control limits: 250212015-06 (180-186617-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Dioxin
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B - TCLP: The TCLP leachate blank for batch 410-608401 contained Copper and Lead above the reporting limit (RL). This target analyte concentration was less than the TCLP Regulatory Limit. The associated samples were also below the TCLP Regulatory Limit for this analyte; therefore, re-extraction was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 350.1 - ASTM Leach: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250212015-06 (180-186617-1). Elevated reporting limits (RLs) are provided.

Method 410.4 - ASTM Leach: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250212015-06 (180-186617-1). Elevated reporting limits (RLs) are provided.

Method 9012_ReactiveCN: The laboratory control sample (LCS) for preparation batch 410-609287 and analytical batch 410-609931 recovered outside control limits for the following analytes: Reactive Cyanide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 9034_Calc: Sample contained headspace. 250212015-06 (180-186617-1), (180-186617-E-1-B MS) and (180-186617-E-1-C MSD)
Method 9034_Calc: Sample was not preserved. 250212015-06 (180-186617-1), (180-186617-E-1-B MS) and (180-186617-E-1-C MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
^c	CCV Recovery is outside acceptance limits.
FH	MS and/or MSD recovery above control limits.
S1-	Surrogate recovery exceeds control limits, low biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
FL	MS and/or MSD recovery below control limits.
S1-	Surrogate recovery exceeds control limits, low biased.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concantration; therefore, control limits are not applicable.
B	Analyte was found in the blank.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
FH	MS and/or MSD recovery above control limits.

General Chemistry

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F2	MS/MSD RPD exceeds control limits
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 9040C		Solid	Temperature
SM 2540E		Solid	Total Volatile Solids

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-186617-1	250212015-06	Solid	02/12/25 06:20	02/14/25 13:40
180-186617-2	250212015-07	Solid	02/12/25 06:20	02/14/25 13:40
180-186617-3	250212015-08	Solid	02/12/25 06:20	02/14/25 13:40
180-186617-4	250212015-09	Solid	02/12/25 06:20	02/14/25 13:40

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	ELLE
6010D	Metals (ICP)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
7471B	Mercury (CVAA)	SW846	ELLE
350.1_GD	Ammonia by Gas Diffusion	EPA	EET PIT
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW846	ELLE
EPA 1020B	Ignitability, Small Scale Closed-Cup Method	SW846	EET PIT
EPA 1664B	HEM and SGT-HEM	EPA	EET PIT
EPA 410.4	COD	MCAWW	EET PIT
EPA 9014	Cyanide	SW846	EET PIT
EPA 9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET PIT
EPA 9040C	pH	SW846	EET PIT
EPA 9065	Phenolics, Total Recoverable	SW846	EET PIT
EPA 9095B	Paint Filter	SW846	EET PIT
SM 2540B	Total Solids	SM	EET PIT
SM 2540E	Solids, Volatile and Fixed (VS)	SM	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
1311	TCLP Extraction	SW846	ELLE
1664B	HEM and SGT-HEM (SPE)	1664B	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3050B	Preparation, Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
410.4	COD	EPA	EET PIT
5030C	Purge and Trap	SW846	ELLE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
7471B	Preparation, Mercury	SW846	ELLE
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET PIT
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET PIT
D3987-85	ASTM Leaching Procedure	ASTM	EET PIT
Distill/Phenol	Distillation, Phenolics	None	EET PIT
EPA 1311	TCLP Extraction	SW846	EET PIT
HRMS-Soxtherm	Soxtherm Extraction	EPA	ELLE

Protocol References:

1664B = EPA-821-98-002
ASTM = ASTM International
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method	Method Description	Protocol	Laboratory

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-06
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25.0 g	140 mL	608985	02/22/25 13:33	ZL4A	ELLE
TCLP	Analysis	8260D		50	5 mL	5 mL	610029	02/26/25 08:32	Z6YX	ELLE
	Instrument ID: 23297									
TCLP	Leach	EPA 1311			100.16 g	2000 mL	490418	02/17/25 10:03	Z1M	EET PIT
TCLP	Prep	3510C			200 mL	10.0 mL	490551	02/19/25 09:19	KAV	EET PIT
TCLP	Analysis	EPA 8270E		1	1 mL	1 mL	490590	02/19/25 22:57	VVP	EET PIT
	Instrument ID: CH733									
TCLP	Leach	EPA 1311			100.16 g	2000 mL	490418	02/17/25 10:03	Z1M	EET PIT
TCLP	Prep	3510C			100 mL	40.0 mL	490554	02/19/25 09:22	KAV	EET PIT
TCLP	Analysis	EPA 8081B		1			490643	02/21/25 06:33	CMR	EET PIT
	Instrument ID: CHGC15									
TCLP	Leach	EPA 1311			100.16 g	2000 mL	490418	02/17/25 10:03	Z1M	EET PIT
TCLP	Prep	8151A			100 mL	10.0 mL	490614	02/20/25 00:51	DPD	EET PIT
TCLP	Analysis	EPA 8151A		20	1 mL	1 mL	490719	02/21/25 09:46	JMO	EET PIT
	Instrument ID: CGC1									
ASTM Leach	Leach	D3987-85			100.14 g	2000 mL	490403	02/17/25 08:42	Z1M	EET PIT
ASTM Leach	Analysis	EPA 9056A		1	1 mL	1 mL	490480	02/18/25 14:40	M1D	EET PIT
	Instrument ID: INUVION									
TCLP	Leach	1311			85.52 g	1710 mL	608401	02/20/25 14:32	U9GW	ELLE
TCLP	Prep	3005A			5 mL	50 mL	609076	02/23/25 21:30	UAMX	ELLE
TCLP	Analysis	6010D		1			609349	02/24/25 11:30	MT26	ELLE
	Instrument ID: T75 - 27278									
TCLP	Leach	1311			85.52 g	1710 mL	608401	02/20/25 14:32	U9GW	ELLE
TCLP	Prep	3005A			5 mL	50 mL	609076	02/23/25 21:30	UAMX	ELLE
TCLP	Analysis	6020B		1			610504	02/26/25 09:35	SAM2	ELLE
	Instrument ID: E08 - 30647									
TCLP	Leach	1311			85.52 g	1710 mL	608401	02/20/25 14:32	U9GW	ELLE
TCLP	Prep	7470A			20 mL	20 mL	609079	02/23/25 23:30	UAMX	ELLE
TCLP	Analysis	7470A		1			809442	02/24/25 12:19	HNC4	ELLE
	Instrument ID: M10 – 31820									
ASTM Leach	Leach	D3987-85			100.14 g	2000 mL	490403	02/17/25 08:42	Z1M	EET PIT
ASTM Leach	Analysis	350.1_GD		50			490625	02/19/25 17:02	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									
Total/NA	Prep	7.3.4			9.99 g	500 mL	609287	02/24/25 10:11	B6LN	ELLE
Total/NA	Analysis	9012		1			609931	02/25/25 13:03	JCG7	ELLE
	Instrument ID: 27769									
Total/NA	Prep	7.3.4			9.99 g	500 mL	609287	02/24/25 10:11	B6LN	ELLE
Total/NA	Analysis	9034		1	200 mL	200 mL	609433	02/24/25 13:00	B6LN	ELLE
	Instrument ID: NOEQUIP									
Total/NA	Analysis	EPA 1020B		1			490691	02/20/25 15:11	RAO	EET PIT
	Instrument ID: LUCI									
ASTM Leach	Leach	D3987-85			100.14 g	2000 mL	490403	02/17/25 08:42	Z1M	EET PIT
ASTM Leach	Prep	410.4			1 mL	10 mL	490589	02/19/25 12:02	ELS	EET PIT
ASTM Leach	Analysis	EPA 410.4		1	1 mL	10 mL	490653	02/19/25 16:42	ELS	EET PIT
	Instrument ID: GENESYS10S									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-06

Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			100.14 g	2000 mL	490403	02/17/25 08:42	Z1M	EET PIT
ASTM Leach	Prep	9010C			6 mL	6 mL	490490	02/18/25 10:45	RAO	EET PIT
ASTM Leach	Analysis	EPA 9014		1			490517	02/18/25 16:13	RAO	EET PIT
	Instrument ID:	SHAMU								
ASTM Leach	Leach	D3987-85			100.14 g	2000 mL	490403	02/17/25 08:42	Z1M	EET PIT
ASTM Leach	Analysis	EPA 9040C		1			490512	02/18/25 13:38	ELS	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	EPA 9095B		1			490504	02/18/25 11:21	ELS	EET PIT
	Instrument ID:	NOEQUIP								
ASTM Leach	Leach	D3987-85			100.14 g	2000 mL	490403	02/17/25 08:42	Z1M	EET PIT
ASTM Leach	Analysis	SM 2540B		1	50 mL	100 mL	490595	02/19/25 14:27	SNR	EET PIT
	Instrument ID:	NOEQUIP								
ASTM Leach	Leach	D3987-85			100.14 g	2000 mL	490403	02/17/25 08:42	Z1M	EET PIT
ASTM Leach	Analysis	SM 2540E		1	50 mL	100 mL	490743	02/19/25 14:27	SNR	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	SM 2540G		1			490443	02/17/25 13:43	LWM	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: 250212015-06

Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1

Matrix: Solid
Percent Solids: 33.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.5 g	5.0 mL	490598	02/19/25 15:17	DVC	EET PIT
Total/NA	Analysis	EPA 8270E		15	1 mL	1 mL	490645	02/20/25 20:03	VVP	EET PIT
	Instrument ID:	CH722								
Total/NA	Prep	3541			15.2 g	20.0 mL	490453	02/18/25 07:04	MKK	EET PIT
Total/NA	Analysis	EPA 8081B		5			490727	02/21/25 16:20	CMR	EET PIT
	Instrument ID:	CHGC15								
Total/NA	Prep	8151A			10.0 g	40.0 mL	490525	02/18/25 22:18	DPD	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	490615	02/20/25 05:19	JMO	EET PIT
	Instrument ID:	CGC1								
Total/NA	Prep	3050B			1.06 g	100 mL	609071	02/23/25 22:00	UAMX	ELLE
Total/NA	Analysis	6010D		1			609375	02/24/25 11:17	MT26	ELLE
	Instrument ID:	T74 - 23745								
Total/NA	Prep	7471B			0.64 g	100 mL	609075	02/23/25 23:40	UAMX	ELLE
Total/NA	Analysis	7471B		1			609302	02/24/25 09:41	HNC4	ELLE
	Instrument ID:	M10 – 31820								
Total/NA	Prep	9010C			0.23 g	10 mL	490364	02/15/25 08:55	RAO	EET PIT
Total/NA	Analysis	EPA 9014		1			490373	02/15/25 11:31	RAO	EET PIT
	Instrument ID:	SHAMU								
Total/NA	Prep	9030B			5.05 mL	50 mL	490422	02/17/25 11:22	EBA	EET PIT
Total/NA	Analysis	EPA 9034		1			490440	02/17/25 13:11	EBA	EET PIT
	Instrument ID:	TITRAT1								

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-07
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			490443	02/17/25 13:43	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250212015-07
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-2
Matrix: Solid
Percent Solids: 30.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	20.0 mL	490393	02/17/25 07:12	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	490461	02/18/25 16:43	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	HRMS-Soxtherm			10.17 g	20 uL	610438	02/26/25 13:11	HZ2S	ELLE
Total/NA	Analysis	8290A		1	20 uL	20 uL	612183	03/04/25 01:13	U4LD	ELLE
	Instrument ID: DF17280B									
Total/NA	Prep	Distill/Phenol			0.50 g	10.0 mL	490451	02/18/25 06:18	RSK	EET PIT
Total/NA	Analysis	EPA 9065		1			490534	02/19/25 06:15	RSK	EET PIT
	Instrument ID: SHAMU									

Client Sample ID: 250212015-08
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			94.85 g	1900 mL	490403	02/17/25 08:42	Z1M	EET PIT
ASTM Leach	Prep	1664B			1000 mL	1000 mL	490628	02/20/25 07:13	A1K	EET PIT
ASTM Leach	Analysis	EPA 1664B		1			490663	02/20/25 11:27	A1K	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250212015-09
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			490443	02/17/25 13:43	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250212015-09
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-4
Matrix: Solid
Percent Solids: 34.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			4.94 g	10 mL	608271	02/20/25 19:18	WJ7F	ELLE
Total/NA	Analysis	8260D		50	5 mL	5 mL	610252	02/26/25 12:23	UCB5	ELLE
	Instrument ID: 7566									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-09
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-4
Matrix: Solid
Percent Solids: 34.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C	RA		4.94 g	10 mL	608271	02/20/25 19:18	WJ7F	ELLE
Total/NA	Analysis	8260D	RA	50	5 mL	5 mL	610252	02/26/25 20:01	UCB5	ELLE
	Instrument ID: 7566									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT

Batch Type: Leach

Z1M = Zee Menakruzz

Batch Type: Prep

A1K = Agnes Komlos
DPD = Declan Donley
DVC = Daniel Capodanno
EBA = Elizabeth Arbster
ELS = Edwin Shireman
KAV = Katelyn Voss
MKK = Mary Kenny
RAO = Rachel Oster
RSK = Robert Kurtz

Batch Type: Analysis

A1K = Agnes Komlos
BAB = Brooke Batyl
CMR = Carl Reagle
EBA = Elizabeth Arbster
ELS = Edwin Shireman
JMO = John Oravec
LWM = Leslie McIntire
M1D = Maureen Donlin
RAO = Rachel Oster
RSK = Robert Kurtz
SNR = Sabra Richart
VVP = Vincent Piccolino

Lab: ELLE

Batch Type: Leach

U9GW = Ivonne Mejia
ZL4A = Isac Moua

Batch Type: Prep

B6LN = Aslin Muniz
HZ2S = Elora Pierce-Sturkey
UAMX = Annamaria Kuhns
WJ7F = Hannah Carter

Batch Type: Analysis

B6LN = Aslin Muniz
HNC4 = Mindy Schantzenbach
JCG7 = Elena Hess
MT26 = Jason Knight
SAM2 = Matthew Olley
U4LD = Arda Ates
UCB5 = Chelsea Riehl
Z6YX = Adam Drapcho

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-06
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.050		mg/L			02/26/25 08:32	50
1,2-Dichloroethane	ND		0.050		mg/L			02/26/25 08:32	50
2-Butanone (MEK)	ND		0.50		mg/L			02/26/25 08:32	50
Benzene	ND		0.050		mg/L			02/26/25 08:32	50
Carbon tetrachloride	ND		0.050		mg/L			02/26/25 08:32	50
Chlorobenzene	ND		0.050		mg/L			02/26/25 08:32	50
Chloroform	ND		0.050		mg/L			02/26/25 08:32	50
Naphthalene	ND		0.25		mg/L			02/26/25 08:32	50
Tetrachloroethene	ND		0.050		mg/L			02/26/25 08:32	50
Trichloroethene	ND		0.050		mg/L			02/26/25 08:32	50
Vinyl chloride	ND		0.050		mg/L			02/26/25 08:32	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*02/26/25 08:32*	*50*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*02/26/25 08:32*	*50*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*02/26/25 08:32*	*50*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/26/25 08:32*	*50*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Acenaphthylene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Acetophenone	ND		29000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Anthracene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Atrazine	ND		29000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Benzaldehyde	ND	FL	29000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Benzo[a]anthracene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Benzo[b]fluoranthene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Benzo[k]fluoranthene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Benzo[g,h,i]perylene	ND	FH	2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Benzo[a]pyrene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
1,1'-Biphenyl	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Bis(2-chloroethoxy)methane	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Bis(2-chloroethyl)ether	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2,2'-oxybis[1-chloropropane]	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Bis(2-ethylhexyl) phthalate	ND	FH	140000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
4-Bromophenyl phenyl ether	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Butyl benzyl phthalate	ND		73000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Caprolactam	ND		74000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Carbazole	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
4-Chloroaniline	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
4-Chloro-3-methylphenol	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2-Chloronaphthalene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2-Chlorophenol	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
4-Chlorophenyl phenyl ether	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Chrysene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Dibenz(a,h)anthracene	ND	FH	2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Dibenzofuran	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Di-n-butyl phthalate	ND		140000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
3,3'-Dichlorobenzidine	ND	FL	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-06
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND	FL	2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Diethyl phthalate	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2,4-Dimethylphenol	ND	FH	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Dimethyl phthalate	ND	FL	29000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
4,6-Dinitro-2-methylphenol	ND	FL	74000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2,4-Dinitrophenol	ND		140000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2,4-Dinitrotoluene	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2,6-Dinitrotoluene	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Di-n-octyl phthalate	ND	^c	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Fluoranthene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Fluorene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Hexachlorobenzene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Hexachlorobutadiene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Hexachlorocyclopentadiene	ND	FL	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Hexachloroethane	ND	FL	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Indeno[1,2,3-cd]pyrene	ND	FH	2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Isophorone	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2-Methylnaphthalene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2-Methylphenol	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Methylphenol, 3 & 4	ND	FH	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Naphthalene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2-Nitroaniline	ND	F2	74000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
3-Nitroaniline	ND		74000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
4-Nitroaniline	ND		74000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Nitrobenzene	ND		29000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2-Nitrophenol	ND	FL	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
4-Nitrophenol	ND	FL	74000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
N-Nitrosodiphenylamine	ND	FH	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
N-Nitrosodi-n-propylamine	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Pentachlorophenol	ND	FL	74000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Phenanthrene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Phenol	ND		14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
Pyrene	ND		2900		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2,4,5-Trichlorophenol	ND	FL	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15
2,4,6-Trichlorophenol	ND	FL	14000		ug/Kg	☼	02/19/25 15:17	02/20/25 20:03	15

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*44 - 105*	*02/19/25 15:17*	*02/20/25 20:03*	*15*
2-Fluorophenol	*51*		*48 - 105*	*02/19/25 15:17*	*02/20/25 20:03*	*15*
2,4,6-Tribromophenol	*19*	*S1-*	*34 - 108*	*02/19/25 15:17*	*02/20/25 20:03*	*15*
Nitrobenzene-d5	*69*		*46 - 105*	*02/19/25 15:17*	*02/20/25 20:03*	*15*
Phenol-d5	*76*		*46 - 105*	*02/19/25 15:17*	*02/20/25 20:03*	*15*
Terphenyl-d14	*81*		*39 - 105*	*02/19/25 15:17*	*02/20/25 20:03*	*15*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1
2,4-Dinitrotoluene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1
Hexachlorobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1
Hexachlorobutadiene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1

Client Sample ID: 250212015-06
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1
2-Methylphenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1
Methylphenol, 3 & 4	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1
Nitrobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1
Pentachlorophenol	ND		0.25		mg/L		02/19/25 09:19	02/19/25 22:57	1
Pyridine	ND		0.10		mg/L		02/19/25 09:19	02/19/25 22:57	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*10 - 130*	*02/19/25 09:19*	*02/19/25 22:57*	*1*
2-Fluorophenol	*54*		*10 - 130*	*02/19/25 09:19*	*02/19/25 22:57*	*1*
2,4,6-Tribromophenol	*79*	*^c*	*10 - 130*	*02/19/25 09:19*	*02/19/25 22:57*	*1*
Nitrobenzene-d5	*60*		*10 - 130*	*02/19/25 09:19*	*02/19/25 22:57*	*1*
Phenol-d5	*54*		*10 - 130*	*02/19/25 09:19*	*02/19/25 22:57*	*1*
Terphenyl-d14	*79*		*10 - 130*	*02/19/25 09:19*	*02/19/25 22:57*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
alpha-BHC	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
beta-BHC	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
delta-BHC	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
gamma-BHC (Lindane)	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
cis-Chlordane	**38**		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
trans-Chlordane	**67**		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
4,4'-DDD	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Chlordane (technical)	ND		250		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
4,4'-DDE	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
4,4'-DDT	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Dieldrin	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Endosulfan I	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Endosulfan II	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Endosulfan sulfate	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Endrin	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Endrin aldehyde	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Endrin ketone	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Heptachlor	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Heptachlor epoxide	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Methoxychlor	ND		25		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5
Toxaphene	ND		1000		ug/Kg	☼	02/18/25 07:04	02/21/25 16:20	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*109*		*69 - 124*	*02/18/25 07:04*	*02/21/25 16:20*	*5*
Tetrachloro-m-xylene	*74*		*69 - 124*	*02/18/25 07:04*	*02/21/25 16:20*	*5*
DCB Decachlorobiphenyl (Surr)	*97*		*65 - 134*	*02/18/25 07:04*	*02/21/25 16:20*	*5*
DCB Decachlorobiphenyl (Surr)	*103*		*65 - 134*	*02/18/25 07:04*	*02/21/25 16:20*	*5*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-06
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050		mg/L		02/19/25 09:22	02/21/25 06:33	1
Endrin	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:33	1
gamma-BHC (Lindane)	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:33	1
Heptachlor	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:33	1
Heptachlor epoxide	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:33	1
Methoxychlor	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:33	1
Toxaphene	ND		0.040		mg/L		02/19/25 09:22	02/21/25 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*60*	*S1-*	*64 - 132*	*02/19/25 09:22*	*02/21/25 06:33*	*1*
DCB Decachlorobiphenyl (Surr)	*60*	*S1-*	*64 - 132*	*02/19/25 09:22*	*02/21/25 06:33*	*1*
Tetrachloro-m-xylene	*63*		*56 - 134*	*02/19/25 09:22*	*02/21/25 06:33*	*1*
Tetrachloro-m-xylene	*59*		*56 - 134*	*02/19/25 09:22*	*02/21/25 06:33*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		240		ug/Kg	☼	02/18/25 22:18	02/20/25 05:19	1
2,4,5-T	ND	^c	60		ug/Kg	☼	02/18/25 22:18	02/20/25 05:19	1
Silvex (2,4,5-TP)	ND	^c	60		ug/Kg	☼	02/18/25 22:18	02/20/25 05:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*65*	*^c*	*21 - 127*	*02/18/25 22:18*	*02/20/25 05:19*	*1*
2,4-Dichlorophenylacetic acid	*68*	*^c*	*21 - 127*	*02/18/25 22:18*	*02/20/25 05:19*	*1*

Method: SW846 EPA 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND	^c	0.040		mg/L		02/20/25 00:51	02/21/25 09:46	20
Silvex (2,4,5-TP)	ND	^c	0.010		mg/L		02/20/25 00:51	02/21/25 09:46	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*54*	*^c*	*21 - 127*	*02/20/25 00:51*	*02/21/25 09:46*	*20*
2,4-Dichlorophenylacetic acid	*53*	*^c*	*21 - 127*	*02/20/25 00:51*	*02/21/25 09:46*	*20*

Method: SW846 EPA 9056A - Anions, Ion Chromatography - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			02/18/25 14:40	1
Nitrate as N	ND		0.10		mg/L			02/18/25 14:40	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		14		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Sulfur	**6100**		140		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Arsenic	ND		14		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Barium	**330**		1.4		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Beryllium	ND		1.4		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Boron	ND		57		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Cadmium	ND		1.4		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Chromium	**30**		4.3		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Copper	**180**		5.7		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Lead	**38**		4.3		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Molybdenum	**5.3**		2.8		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-06
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**18**		2.8		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Selenium	ND		14		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Silver	ND		2.8		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Sodium	**760**		280		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Thallium	ND		8.5		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1
Zinc	**430**		5.7		mg/Kg	☼	02/23/25 22:00	02/24/25 11:17	1

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		02/23/25 21:30	02/24/25 11:30	1

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.0**		0.25		mg/L		02/23/25 21:30	02/26/25 09:35	1
Arsenic	ND		0.020		mg/L		02/23/25 21:30	02/26/25 09:35	1
Barium	**0.55**		0.020		mg/L		02/23/25 21:30	02/26/25 09:35	1
Cadmium	ND		0.0050		mg/L		02/23/25 21:30	02/26/25 09:35	1
Chromium	ND		0.020		mg/L		02/23/25 21:30	02/26/25 09:35	1
Copper	**0.51**	**B**	0.010		mg/L		02/23/25 21:30	02/26/25 09:35	1
Silver	ND		0.0050		mg/L		02/23/25 21:30	02/26/25 09:35	1
Molybdenum	**0.0098**		0.0050		mg/L		02/23/25 21:30	02/26/25 09:35	1
Nickel	**0.10**		0.010		mg/L		02/23/25 21:30	02/26/25 09:35	1
Lead	**0.014**	**B**	0.0050		mg/L		02/23/25 21:30	02/26/25 09:35	1
Antimony	ND		0.010		mg/L		02/23/25 21:30	02/26/25 09:35	1
Selenium	ND		0.010		mg/L		02/23/25 21:30	02/26/25 09:35	1
Zinc	**2.1**		0.10		mg/L		02/23/25 21:30	02/26/25 09:35	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/23/25 23:30	02/24/25 12:19	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.38**		0.17		mg/Kg	☼	02/23/25 23:40	02/24/25 09:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive (SW846 9012)	ND	*+	90		mg/Kg		02/24/25 10:11	02/25/25 13:03	1
Sulfide, Reactive (SW846 9034)	ND		160		mg/Kg		02/24/25 10:11	02/24/25 13:00	1
Ignitability (SW846 EPA 1020B)	**>140**				Degrees F			02/20/25 15:11	1
Cyanide, Total (SW846 EPA 9014)	**8.7**		1.3		mg/Kg	☼	02/15/25 08:55	02/15/25 11:31	1
Sulfide (SW846 EPA 9034)	ND		90		mg/Kg	☼	02/17/25 11:22	02/17/25 13:11	1
Free Liquid (SW846 EPA 9095B)	**CNF**		0.10		NONE			02/18/25 11:21	1
Total Solids (SM 2540G)	**33**		0.50		%			02/17/25 13:43	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled (EPA 350.1_GD)	**31**		5.0		mg/L			02/19/25 17:02	50
Chemical Oxygen Demand (MCAWW EPA 410.4)	**1400**		100		mg/L		02/19/25 12:02	02/19/25 16:42	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-06
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-1
Matrix: Solid
Percent Solids: 33.1

General Chemistry - ASTM Leach (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 EPA 9014)	12		10		ug/L		02/18/25 10:45	02/18/25 16:13	1
pH (SW846 EPA 9040C)	12.0		0.1		SU			02/18/25 13:38	1
Temperature (SW846 EPA 9040C)	25.0	I	0.1		Degrees C			02/18/25 13:38	1
Total Solids (SM 2540B)	2300		20		mg/L			02/19/25 14:27	1
Total Volatile Solids (SM 2540E)	1100	I	20		mg/L			02/19/25 14:27	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-07
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-2
Matrix: Solid
Percent Solids: 30.1

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		55		ug/Kg	☼	02/17/25 07:12	02/18/25 16:43	1
PCB-1221	ND		55		ug/Kg	☼	02/17/25 07:12	02/18/25 16:43	1
PCB-1232	ND		55		ug/Kg	☼	02/17/25 07:12	02/18/25 16:43	1
PCB-1242	ND		55		ug/Kg	☼	02/17/25 07:12	02/18/25 16:43	1
PCB-1248	ND		55		ug/Kg	☼	02/17/25 07:12	02/18/25 16:43	1
PCB-1254	**930**		55		ug/Kg	☼	02/17/25 07:12	02/18/25 18:43	1
PCB-1260	ND		55		ug/Kg	☼	02/17/25 07:12	02/18/25 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*66*		*60 - 135*	*02/17/25 07:12*	*02/18/25 16:43*	*1*
Tetrachloro-m-xylene (Surr)	*61*		*60 - 135*	*02/17/25 07:12*	*02/18/25 16:43*	*1*
DCB Decachlorobiphenyl (Surr)	*78*		*57 - 146*	*02/17/25 07:12*	*02/18/25 16:43*	*1*
DCB Decachlorobiphenyl (Surr)	*71*		*57 - 146*	*02/17/25 07:12*	*02/18/25 16:43*	*1*

Method: SW846 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		3.3		pg/g	☼	02/26/25 13:11	03/04/25 01:13	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*65*		*40 - 135*	*02/26/25 13:11*	*03/04/25 01:13*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (SW846 EPA 9065)	**3.1**		0.66		mg/Kg	☼	02/18/25 06:18	02/19/25 06:15	1
Total Solids (SM 2540G)	**30**		0.50		%			02/17/25 13:43	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-08
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-3
Matrix: Solid

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (EPA 1664B)	ND		5.0		mg/L		02/20/25 07:13	02/20/25 11:27	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-09
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-4
Matrix: Solid
Percent Solids: 34.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,1,2,2-Tetrachloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,1,2-Trichloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,1-Dichloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,1-Dichloroethene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,2-Dichlorobenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,2-Dichloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,2-Dichloropropane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,3-Dichlorobenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
1,4-Dichlorobenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Methyl Ethyl Ketone	**12000**	**^c**	3900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
2-Chloroethyl vinyl ether	ND		3900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
2-Hexanone	ND	^c	3900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
methyl isobutyl ketone	ND	^c	3900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Acetone	**34000**	**^c**	7700		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Benzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Bromoform	ND		3900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Bromomethane	ND	^c *+	1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Carbon disulfide	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Carbon tetrachloride	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Chlorobenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Dibromochloromethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Chloroethane	ND	^c *+	1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Chloroform	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Chloromethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
cis-1,3-Dichloropropene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Bromodichloromethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Ethylbenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Methylene Chloride	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
m-Xylene & p-Xylene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
o-Xylene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Styrene	ND		1900		ug/Kg	☼	02/20/25 19:16	02/26/25 12:23	50
Tetrachloroethene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Toluene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
trans-1,2-Dichloroethene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
trans-1,3-Dichloropropene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Trichloroethene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Trichlorofluoromethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Vinyl acetate	ND		3900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Vinyl chloride	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50
Xylenes, Total	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 12:23	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*54 - 135*	*02/20/25 19:18*	*02/26/25 12:23*	*50*
4-Bromofluorobenzene (Surr)	*93*		*50 - 131*	*02/20/25 19:18*	*02/26/25 12:23*	*50*
Dibromofluoromethane (Surr)	*16*	*S1-*	*50 - 141*	*02/20/25 19:18*	*02/26/25 12:23*	*50*
Toluene-d8 (Surr)	*99*		*52 - 141*	*02/20/25 19:18*	*02/26/25 12:23*	*50*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-09
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-4
Matrix: Solid
Percent Solids: 34.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,1,2,2-Tetrachloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,1,2-Trichloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,1-Dichloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,1-Dichloroethene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,2-Dichlorobenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,2-Dichloroethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,2-Dichloropropane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,3-Dichlorobenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
1,4-Dichlorobenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Methyl Ethyl Ketone	**10000**	***3 ^c**	3900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
2-Chloroethyl vinyl ether	ND		3900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
2-Hexanone	ND	^c	3900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
methyl isobutyl ketone	ND	^c	3900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Acetone	**46000**	***3 ^c**	7700		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Benzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Bromoform	ND		3900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Bromomethane	ND	*3 ^c *+	1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Carbon disulfide	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Carbon tetrachloride	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Chlorobenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Dibromochloromethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Chloroethane	ND	*3 ^c *+	1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Chloroform	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Chloromethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
cis-1,3-Dichloropropene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Bromodichloromethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Ethylbenzene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Methylene Chloride	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
m-Xylene & p-Xylene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
o-Xylene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Styrene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Tetrachloroethene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Toluene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
trans-1,2-Dichloroethene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
trans-1,3-Dichloropropene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Trichloroethene	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Trichlorofluoromethane	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Vinyl acetate	ND		3900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Vinyl chloride	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50
Xylenes, Total	ND		1900		ug/Kg	☼	02/20/25 19:18	02/26/25 20:01	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*54 - 135*	*02/20/25 19:18*	*02/26/25 20:01*	*50*
4-Bromofluorobenzene (Surr)	*92*		*50 - 131*	*02/20/25 19:18*	*02/26/25 20:01*	*50*
Dibromofluoromethane (Surr)	*12*	*S1-*	*50 - 141*	*02/20/25 19:18*	*02/26/25 20:01*	*50*
Toluene-d8 (Surr)	*101*		*52 - 141*	*02/20/25 19:18*	*02/26/25 20:01*	*50*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Client Sample ID: 250212015-09
Date Collected: 02/12/25 06:20
Date Received: 02/14/25 13:40

Lab Sample ID: 180-186617-4
Matrix: Solid
Percent Solids: 34.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	35		0.50		%			02/17/25 13:43	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: 180-185659-F-3-B MS
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 600834

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		963	898		ug/Kg	☼	93	69 - 123
1,1,2,2-Tetrachloroethane	ND		963	872		ug/Kg	☼	91	69 - 125
1,1,2-Trichloroethane	ND		963	927		ug/Kg	☼	96	76 - 120
1,1-Dichloroethane	ND		963	917		ug/Kg	☼	95	68 - 120
1,1-Dichloroethene	ND		963	958		ug/Kg	☼	99	73 - 129
1,2-Dichlorobenzene	ND		963	873		ug/Kg	☼	91	74 - 120
1,2-Dichloroethane	ND		963	878		ug/Kg	☼	91	72 - 124
1,2-Dichloropropane	ND		963	938		ug/Kg	☼	97	70 - 124
1,3-Dichlorobenzene	ND		963	924		ug/Kg	☼	96	75 - 120
1,4-Dichlorobenzene	ND		963	919		ug/Kg	☼	95	76 - 122
Methyl Ethyl Ketone	ND	^c	12000	16800		ug/Kg	☼	140	48 - 142
2-Chloroethyl vinyl ether	ND		963	855		ug/Kg	☼	89	68 - 120
2-Hexanone	ND	^c	12000	11300		ug/Kg	☼	94	54 - 140
methyl isobutyl ketone	ND	^c	12000	10500		ug/Kg	☼	87	67 - 138
Acetone	ND	^c	12000	15900		ug/Kg	☼	132	28 - 169
Benzene	ND		963	927		ug/Kg	☼	96	80 - 120
Bromoform	ND		963	704		ug/Kg	☼	73	66 - 127
Bromomethane	ND	^c *+ FH	963	2870	FH	ug/Kg	☼	298	60 - 120
Carbon disulfide	ND		963	757		ug/Kg	☼	79	64 - 133
Carbon tetrachloride	ND		963	869		ug/Kg	☼	90	64 - 120
Chlorobenzene	ND		963	963		ug/Kg	☼	100	74 - 120
Dibromochloromethane	ND		963	809		ug/Kg	☼	84	69 - 125
Chloroethane	ND	^c *+ FH	963	2400	FH	ug/Kg	☼	249	55 - 127
Chloroform	ND		963	902		ug/Kg	☼	94	73 - 120
Chloromethane	ND		963	644		ug/Kg	☼	67	43 - 120
cis-1,3-Dichloropropene	ND		963	831		ug/Kg	☼	86	66 - 120
Bromodichloromethane	ND		963	853		ug/Kg	☼	69	70 - 120
Ethylbenzene	ND		963	963		ug/Kg	☼	100	72 - 118
Methylene Chloride	ND		963	918		ug/Kg	☼	95	76 - 122
m-Xylene & p-Xylene	ND		1930	1920		ug/Kg	☼	100	80 - 120
o-Xylene	ND		963	922		ug/Kg	☼	96	75 - 120
Styrene	ND		963	911		ug/Kg	☼	95	76 - 120
Tetrachloroethene	ND		963	907		ug/Kg	☼	94	73 - 120
Toluene	ND		963	962		ug/Kg	☼	100	71 - 120
trans-1,2-Dichloroethene	ND		963	931		ug/Kg	☼	97	71 - 126
trans-1,3-Dichloropropene	ND		963	832		ug/Kg	☼	86	68 - 122
Trichloroethene	ND		963	936		ug/Kg	☼	97	72 - 120
Trichlorofluoromethane	ND		963	618		ug/Kg	☼	64	49 - 120
Vinyl chloride	ND		963	714		ug/Kg	☼	74	52 - 120
Xylenes, Total	ND		2890	2840		ug/Kg	☼	98	75 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*67*		*54 - 135*
4-Bromofluorobenzene (Surr)	*72*		*50 - 131*
Dibromofluoromethane (Surr)	*71*		*50 - 141*
Toluene-d8 (Surr)	*76*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-185659-F-3-C MSD
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 600834

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		997	949		ug/Kg	☼	95	69 - 123	6	30
1,1,2,2-Tetrachloroethane	ND		997	983		ug/Kg	☼	99	69 - 125	12	30
1,1,2-Trichloroethane	ND		997	975		ug/Kg	☼	98	76 - 120	5	30
1,1-Dichloroethane	ND		997	961		ug/Kg	☼	96	68 - 120	5	30
1,1-Dichloroethene	ND		997	1010		ug/Kg	☼	101	73 - 129	5	30
1,2-Dichlorobenzene	ND		997	936		ug/Kg	☼	94	74 - 120	7	30
1,2-Dichloroethane	ND		997	905		ug/Kg	☼	91	72 - 124	3	30
1,2-Dichloropropane	ND		997	965		ug/Kg	☼	97	70 - 124	3	30
1,3-Dichlorobenzene	ND		997	974		ug/Kg	☼	98	75 - 120	5	30
1,4-Dichlorobenzene	ND		997	988		ug/Kg	☼	99	76 - 122	7	30
Methyl Ethyl Ketone	ND	^c	12500	17400		ug/Kg	☼	140	48 - 142	3	30
2-Chloroethyl vinyl ether	ND		997	915		ug/Kg	☼	92	68 - 120	7	30
2-Hexanone	ND	^c	12500	11400		ug/Kg	☼	91	54 - 140	0	30
methyl isobutyl ketone	ND	^c	12500	10900		ug/Kg	☼	88	67 - 138	4	30
Acetone	ND	^c	12500	13200		ug/Kg	☼	106	28 - 169	19	30
Benzene	ND		997	970		ug/Kg	☼	97	80 - 120	5	30
Bromoform	ND		997	760		ug/Kg	☼	76	66 - 127	8	30
Bromomethane	ND	^c *+ FH	997	3160	FH	ug/Kg	☼	317	60 - 120	10	30
Carbon disulfide	ND		997	810		ug/Kg	☼	81	64 - 133	7	30
Carbon tetrachloride	ND		997	922		ug/Kg	☼	93	64 - 120	6	30
Chlorobenzene	ND		997	990		ug/Kg	☼	99	74 - 120	3	30
Dibromochloromethane	ND		997	862		ug/Kg	☼	86	69 - 125	6	30
Chloroethane	ND	^c *+ FH	997	2660	FH	ug/Kg	☼	267	55 - 127	11	30
Chloroform	ND		997	923		ug/Kg	☼	93	73 - 120	2	30
Chloromethane	ND		997	709		ug/Kg	☼	71	43 - 120	10	30
cis-1,3-Dichloropropene	ND		997	862		ug/Kg	☼	66	66 - 120	4	30
Bromodichloromethane	ND		997	888		ug/Kg	☼	89	70 - 120	4	30
Ethylbenzene	ND		997	986		ug/Kg	☼	99	72 - 118	2	30
Methylene Chloride	ND		997	977		ug/Kg	☼	98	76 - 122	6	30
m-Xylene & p-Xylene	ND		1990	1970		ug/Kg	☼	99	80 - 120	2	30
o-Xylene	ND		997	943		ug/Kg	☼	95	75 - 120	2	30
Styrene	ND		997	942		ug/Kg	☼	94	76 - 120	3	30
Tetrachloroethene	ND		997	946		ug/Kg	☼	95	73 - 120	4	30
Toluene	ND		997	999		ug/Kg	☼	100	71 - 120	4	30
trans-1,2-Dichloroethene	ND		997	963		ug/Kg	☼	97	71 - 126	3	30
trans-1,3-Dichloropropene	ND		997	876		ug/Kg	☼	88	68 - 122	5	30
Trichloroethene	ND		997	969		ug/Kg	☼	97	72 - 120	3	30
Trichlorofluoromethane	ND		997	657		ug/Kg	☼	66	49 - 120	6	30
Vinyl chloride	ND		997	780		ug/Kg	☼	78	52 - 120	9	30
Xylenes, Total	ND		2990	2910		ug/Kg	☼	97	75 - 120	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*68*		*54 - 135*
4-Bromofluorobenzene (Surr)	*77*		*50 - 131*
Dibromofluoromethane (Surr)	*70*		*50 - 141*
Toluene-d8 (Surr)	*77*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-610029/6
Matrix: Solid
Analysis Batch: 610029

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010		mg/L			02/25/25 23:13	1
1,2-Dichloroethane	ND		0.0010		mg/L			02/25/25 23:13	1
Naphthalene	ND		0.0050		mg/L			02/25/25 23:13	1
2-Butanone (MEK)	ND		0.010		mg/L			02/25/25 23:13	1
Benzene	ND		0.0010		mg/L			02/25/25 23:13	1
Carbon tetrachloride	ND		0.0010		mg/L			02/25/25 23:13	1
Chlorobenzene	ND		0.0010		mg/L			02/25/25 23:13	1
Chloroform	ND		0.0010		mg/L			02/25/25 23:13	1
Tetrachloroethene	ND		0.0010		mg/L			02/25/25 23:13	1
Trichloroethene	ND		0.0010		mg/L			02/25/25 23:13	1
Vinyl chloride	ND		0.0010		mg/L			02/25/25 23:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*02/25/25 23:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*02/25/25 23:13*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*02/25/25 23:13*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/25/25 23:13*	*1*

Lab Sample ID: LCS 410-610029/4
Matrix: Solid
Analysis Batch: 610029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	0.0200	0.0209		mg/L		105	80 - 131
1,2-Dichloroethane	0.0200	0.0192		mg/L		96	73 - 124
Naphthalene	0.0200	0.0190		mg/L		95	67 - 124
2-Butanone (MEK)	0.250	0.230		mg/L		92	59 - 135
Benzene	0.0200	0.0199		mg/L		99	80 - 120
Carbon tetrachloride	0.0200	0.0195		mg/L		98	64 - 134
Chlorobenzene	0.0200	0.0195		mg/L		97	80 - 120
Chloroform	0.0200	0.0196		mg/L		98	80 - 120
Tetrachloroethene	0.0200	0.0194		mg/L		97	80 - 120
Trichloroethene	0.0200	0.0197		mg/L		98	80 - 120
Vinyl chloride	0.0200	0.0183		mg/L		91	58 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 410-610252/11
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250		ug/Kg			02/26/25 12:03	50
1,1,2,2-Tetrachloroethane	ND		250		ug/Kg			02/26/25 12:03	50

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-610252/11
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		250		ug/Kg			02/26/25 12:03	50
1,1-Dichloroethane	ND		250		ug/Kg			02/26/25 12:03	50
1,1-Dichloroethene	ND		250		ug/Kg			02/26/25 12:03	50
1,2-Dichlorobenzene	ND		250		ug/Kg			02/26/25 12:03	50
1,2-Dichloroethane	ND		250		ug/Kg			02/26/25 12:03	50
1,2-Dichloropropane	ND		250		ug/Kg			02/26/25 12:03	50
1,3-Dichlorobenzene	ND		250		ug/Kg			02/26/25 12:03	50
1,4-Dichlorobenzene	ND		250		ug/Kg			02/26/25 12:03	50
Methyl Ethyl Ketone	ND		500		ug/Kg			02/26/25 12:03	50
2-Chloroethyl vinyl ether	ND		500		ug/Kg			02/26/25 12:03	50
2-Hexanone	ND		500		ug/Kg			02/26/25 12:03	50
methyl isobutyl ketone	ND		500		ug/Kg			02/26/25 12:03	50
Acetone	ND		1000		ug/Kg			02/26/25 12:03	50
Benzene	ND		250		ug/Kg			02/26/25 12:03	50
Bromoform	ND		500		ug/Kg			02/26/25 12:03	50
Bromomethane	ND		250		ug/Kg			02/26/25 12:03	50
Carbon disulfide	ND		250		ug/Kg			02/26/25 12:03	50
Carbon tetrachloride	ND		250		ug/Kg			02/26/25 12:03	50
Chlorobenzene	ND		250		ug/Kg			02/26/25 12:03	50
Dibromochloromethane	ND		250		ug/Kg			02/26/25 12:03	50
Chloroethane	ND		250		ug/Kg			02/26/25 12:03	50
Chloroform	ND		250		ug/Kg			02/26/25 12:03	50
Chloromethane	ND		250		ug/Kg			02/26/25 12:03	50
cis-1,3-Dichloropropene	ND		250		ug/Kg			02/26/25 12:03	50
Bromodichloromethane	ND		250		ug/Kg			02/26/25 12:03	50
Ethylbenzene	ND		250		ug/Kg			02/26/25 12:03	50
Methylene Chloride	ND		250		ug/Kg			02/26/25 12:03	50
m-Xylene & p-Xylene	ND		250		ug/Kg			02/26/25 12:03	50
o-Xylene	ND		250		ug/Kg			02/26/25 12:03	50
Styrene	ND		250		ug/Kg			02/26/25 12:03	50
Tetrachloroethene	ND		250		ug/Kg			02/26/25 12:03	50
Toluene	ND		250		ug/Kg			02/26/25 12:03	50
trans-1,2-Dichloroethene	ND		250		ug/Kg			02/26/25 12:03	50
trans-1,3-Dichloropropene	ND		250		ug/Kg			02/26/25 12:03	50
Trichloroethene	ND		250		ug/Kg			02/26/25 12:03	50
Trichlorofluoromethane	ND		250		ug/Kg			02/26/25 12:03	50
Vinyl acetate	ND		500		ug/Kg			02/26/25 12:03	50
Vinyl chloride	ND		250		ug/Kg			02/26/25 12:03	50
Xylenes, Total	ND		250		ug/Kg			02/26/25 12:03	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*54 - 135*		*02/26/25 12:03*	*50*
4-Bromofluorobenzene (Surr)	*85*		*50 - 131*		*02/26/25 12:03*	*50*
Dibromofluoromethane (Surr)	*86*		*50 - 141*		*02/26/25 12:03*	*50*
Toluene-d8 (Surr)	*91*		*52 - 141*		*02/26/25 12:03*	*50*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-610252/6
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1000	1000		ug/Kg		100	69 - 123
1,1,2,2-Tetrachloroethane	1000	950		ug/Kg		95	69 - 125
1,1,2-Trichloroethane	1000	979		ug/Kg		98	76 - 120
1,1-Dichloroethane	1000	1060		ug/Kg		106	68 - 120
1,1-Dichloroethene	1000	1100		ug/Kg		110	73 - 129
1,2-Dichlorobenzene	1000	912		ug/Kg		91	74 - 120
1,2-Dichloroethane	1000	998		ug/Kg		100	72 - 124
1,2-Dichloropropane	1000	1030		ug/Kg		103	70 - 124
1,3-Dichlorobenzene	1000	936		ug/Kg		94	75 - 120
1,4-Dichlorobenzene	1000	936		ug/Kg		94	76 - 122
Methyl Ethyl Ketone	12500	14200		ug/Kg		114	48 - 142
2-Chloroethyl vinyl ether	1000	954		ug/Kg		95	68 - 120
2-Hexanone	12500	12200		ug/Kg		98	54 - 140
methyl isobutyl ketone	12500	12600		ug/Kg		101	67 - 138
Acetone	12500	13200		ug/Kg		105	28 - 169
Benzene	1000	1040		ug/Kg		104	80 - 120
Bromoform	1000	754		ug/Kg		75	88 - 127
Bromomethane	1000	2600	*+	ug/Kg		260	60 - 120
Carbon disulfide	1000	913		ug/Kg		91	64 - 133
Carbon tetrachloride	1000	950		ug/Kg		95	64 - 120
Chlorobenzene	1000	1000		ug/Kg		100	74 - 120
Dibromochloromethane	1000	853		ug/Kg		85	69 - 125
Chloroethane	1000	2420	*+	ug/Kg		242	55 - 127
Chloroform	1000	1020		ug/Kg		102	73 - 120
Chloromethane	1000	972		ug/Kg		97	43 - 120
cis-1,3-Dichloropropene	1000	900		ug/Kg		90	66 - 120
Bromodichloromethane	1000	928		ug/Kg		93	70 - 120
Ethylbenzene	1000	1010		ug/Kg		101	72 - 118
Methylene Chloride	1000	1060		ug/Kg		106	78 - 122
m-Xylene & p-Xylene	2000	1990		ug/Kg		100	80 - 120
o-Xylene	1000	967		ug/Kg		97	75 - 120
Styrene	1000	944		ug/Kg		94	76 - 120
Tetrachloroethene	1000	966		ug/Kg		97	73 - 120
Toluene	1000	1030		ug/Kg		103	71 - 120
trans-1,2-Dichloroethene	1000	1070		ug/Kg		107	71 - 126
trans-1,3-Dichloropropene	1000	868		ug/Kg		87	68 - 122
Trichloroethene	1000	1030		ug/Kg		103	72 - 120
Trichlorofluoromethane	1000	958		ug/Kg		96	49 - 120
Vinyl chloride	1000	995		ug/Kg		100	52 - 120
Xylenes, Total	3000	2960		ug/Kg		99	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*54 - 135*
4-Bromofluorobenzene (Surr)	*88*		*50 - 131*
Dibromofluoromethane (Surr)	*87*		*50 - 141*
Toluene-d8 (Surr)	*90*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-610252/8
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	5000	4920		ug/Kg		98	68 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*54 - 135*
4-Bromofluorobenzene (Surr)	*92*		*50 - 131*
Dibromofluoromethane (Surr)	*89*		*50 - 141*
Toluene-d8 (Surr)	*93*		*52 - 141*

Lab Sample ID: LCSD 410-610252/7
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	956		ug/Kg		96	69 - 123	5	30
1,1,2,2-Tetrachloroethane	1000	971		ug/Kg		97	69 - 125	2	30
1,1,2-Trichloroethane	1000	959		ug/Kg		96	76 - 120	2	30
1,1-Dichloroethane	1000	1010		ug/Kg		101	68 - 120	5	30
1,1-Dichloroethene	1000	1050		ug/Kg		105	73 - 129	5	30
1,2-Dichlorobenzene	1000	918		ug/Kg		92	74 - 120	1	30
1,2-Dichloroethane	1000	973		ug/Kg		97	72 - 124	3	30
1,2-Dichloropropane	1000	1010		ug/Kg		101	70 - 124	2	30
1,3-Dichlorobenzene	1000	921		ug/Kg		92	75 - 120	2	30
1,4-Dichlorobenzene	1000	931		ug/Kg		93	76 - 122	1	30
Methyl Ethyl Ketone	12500	16200		ug/Kg		130	48 - 142	13	30
2-Chloroethyl vinyl ether	1000	942		ug/Kg		94	68 - 120	1	30
2-Hexanone	12500	12500		ug/Kg		100	54 - 140	2	30
methyl isobutyl ketone	12500	12800		ug/Kg		103	67 - 136	2	30
Acetone	12500	16500		ug/Kg		132	28 - 169	22	30
Benzene	1000	1000		ug/Kg		100	80 - 120	4	30
Bromoform	1000	768		ug/Kg		77	66 - 127	2	30
Bromomethane	1000	3020	*+	ug/Kg		302	60 - 120	15	30
Carbon disulfide	1000	874		ug/Kg		87	64 - 133	4	30
Carbon tetrachloride	1000	910		ug/Kg		91	84 - 120	4	30
Chlorobenzene	1000	969		ug/Kg		97	74 - 120	3	30
Dibromochloromethane	1000	861		ug/Kg		86	69 - 125	1	30
Chloroethane	1000	2660	*+	ug/Kg		266	55 - 127	10	30
Chloroform	1000	984		ug/Kg		98	73 - 120	3	30
Chloromethane	1000	932		ug/Kg		93	43 - 120	4	30
cis-1,3-Dichloropropene	1000	881		ug/Kg		88	66 - 120	2	30
Bromodichloromethane	1000	916		ug/Kg		92	70 - 120	1	30
Ethylbenzene	1000	973		ug/Kg		97	72 - 118	3	30
Methylene Chloride	1000	1040		ug/Kg		104	76 - 122	2	30
m-Xylene & p-Xylene	2000	1940		ug/Kg		97	80 - 120	3	30
o-Xylene	1000	947		ug/Kg		95	75 - 120	2	30
Styrene	1000	930		ug/Kg		93	76 - 120	1	30
Tetrachloroethene	1000	925		ug/Kg		93	73 - 120	4	30
Toluene	1000	990		ug/Kg		99	71 - 120	4	30
trans-1,2-Dichloroethene	1000	1020		ug/Kg		102	71 - 126	5	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-610252/7
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	1000	863		ug/Kg		86	68 - 122	1	30
Trichloroethene	1000	995		ug/Kg		99	72 - 120	4	30
Trichlorofluoromethane	1000	902		ug/Kg		90	49 - 120	6	30
Vinyl chloride	1000	944		ug/Kg		94	52 - 120	5	30
Xylenes, Total	3000	2890		ug/Kg		96	75 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*54 - 135*
4-Bromofluorobenzene (Surr)	*87*		*50 - 131*
Dibromofluoromethane (Surr)	*85*		*50 - 141*
Toluene-d8 (Surr)	*87*		*52 - 141*

Lab Sample ID: LCSD 410-610252/9
Matrix: Solid
Analysis Batch: 610252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	5000	4740		ug/Kg		95	68 - 128	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*54 - 135*
4-Bromofluorobenzene (Surr)	*90*		*50 - 131*
Dibromofluoromethane (Surr)	*87*		*50 - 141*
Toluene-d8 (Surr)	*89*		*52 - 141*

Lab Sample ID: 180-186460-G-1-A MS
Matrix: Solid
Analysis Batch: 610029

Client Sample ID: Matrix Spike
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	ND	FH	0.400	0.497	FH	mg/L		124	74 - 121
1,2-Dichloroethane	ND		0.400	0.393		mg/L		98	69 - 120
Naphthalene	ND		0.400	0.343		mg/L		86	62 - 120
2-Butanone (MEK)	ND		5.00	4.36		mg/L		87	65 - 131
Benzene	ND		0.400	0.429		mg/L		107	81 - 120
Carbon tetrachloride	ND		0.400	0.440		mg/L		110	63 - 128
Chlorobenzene	ND		0.400	0.403		mg/L		101	80 - 120
Chloroform	ND		0.400	0.422		mg/L		104	74 - 120
Tetrachloroethene	ND		0.400	0.423		mg/L		106	68 - 125
Trichloroethene	ND		0.400	0.422		mg/L		105	76 - 120
Vinyl chloride	ND		0.400	0.389		mg/L		97	52 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-490551/1-A
Matrix: Solid
Analysis Batch: 490590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
Pyridine	ND		0.10		mg/L		02/19/25 09:19	02/19/25 14:36	1
2,4-Dinitrotoluene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
Hexachlorobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
Hexachlorobutadiene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
Hexachloroethane	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
2-Methylphenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
Methylphenol, 3 & 4	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
Nitrobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
Pentachlorophenol	ND		0.25		mg/L		02/19/25 09:19	02/19/25 14:36	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 14:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*10 - 130*	*02/19/25 09:19*	*02/19/25 14:36*	*1*
2-Fluorophenol	*63*		*10 - 130*	*02/19/25 09:19*	*02/19/25 14:36*	*1*
2,4,6-Tribromophenol	*81*		*10 - 130*	*02/19/25 09:19*	*02/19/25 14:36*	*1*
Nitrobenzene-d5	*56*		*10 - 130*	*02/19/25 09:19*	*02/19/25 14:36*	*1*
Phenol-d5	*60*		*10 - 130*	*02/19/25 09:19*	*02/19/25 14:36*	*1*
Terphenyl-d14	*70*		*10 - 130*	*02/19/25 09:19*	*02/19/25 14:36*	*1*

Lab Sample ID: LCS 180-490551/2-A
Matrix: Solid
Analysis Batch: 490590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	0.250	0.153		mg/L		61	10 - 130
Pyridine	0.250	0.177		mg/L		71	10 - 130
2,4-Dinitrotoluene	0.250	0.132		mg/L		53	10 - 130
Hexachlorobenzene	0.250	0.125		mg/L		50	10 - 130
Hexachlorobutadiene	0.250	0.182		mg/L		73	10 - 130
Hexachloroethane	0.250	0.159		mg/L		63	10 - 130
2-Methylphenol	0.250	0.158		mg/L		63	10 - 130
Methylphenol, 3 & 4	0.500	0.302		mg/L		60	10 - 130
Nitrobenzene	0.250	0.147		mg/L		59	10 - 130
Pentachlorophenol	0.250	0.163	J	mg/L		65	10 - 130
2,4,5-Trichlorophenol	0.250	0.158		mg/L		63	10 - 130
2,4,6-Trichlorophenol	0.250	0.159		mg/L		64	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*10 - 130*
2-Fluorophenol	*61*		*10 - 130*
2,4,6-Tribromophenol	*73*		*10 - 130*
Nitrobenzene-d5	*56*		*10 - 130*
Phenol-d5	*57*		*10 - 130*
Terphenyl-d14	*66*		*10 - 130*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-490551/3-A
Matrix: Solid
Analysis Batch: 490590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 490551

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.250	0.153		mg/L		61	10 - 130	0	15
Pyridine	0.250	0.182		mg/L		73	10 - 130	3	15
2,4-Dinitrotoluene	0.250	0.142		mg/L		57	10 - 130	7	15
Hexachlorobenzene	0.250	0.131		mg/L		52	10 - 130	4	15
Hexachlorobutadiene	0.250	0.187		mg/L		75	10 - 130	3	15
Hexachloroethane	0.250	0.155		mg/L		62	10 - 130	2	15
2-Methylphenol	0.250	0.159		mg/L		64	10 - 130	1	15
Methylphenol, 3 & 4	0.500	0.293		mg/L		59	10 - 130	3	15
Nitrobenzene	0.250	0.142		mg/L		57	10 - 130	3	15
Pentachlorophenol	0.250	0.165	J	mg/L		66	10 - 130	1	27
2,4,5-Trichlorophenol	0.250	0.159		mg/L		64	10 - 130	1	15
2,4,6-Trichlorophenol	0.250	0.162		mg/L		65	10 - 130	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*10 - 130*
2-Fluorophenol	*60*		*10 - 130*
2,4,6-Tribromophenol	*79*		*10 - 130*
Nitrobenzene-d5	*59*		*10 - 130*
Phenol-d5	*57*		*10 - 130*
Terphenyl-d14	*65*		*10 - 130*

Lab Sample ID: MB 180-490598/1-A
Matrix: Solid
Analysis Batch: 490645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Acenaphthylene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Acetophenone	ND		670		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Anthracene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Atrazine	ND		670		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Benzaldehyde	ND		670		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Benzo[a]anthracene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Benzo[b]fluoranthene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Benzo[k]fluoranthene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Benzo[g,h,i]perylene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:56	1
Benzo[a]pyrene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:56	1
1,1'-Biphenyl	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Bis(2-chloroethyl)ether	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2,2'-oxybis[1-chloropropane]	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Bis(2-ethylhexyl) phthalate	ND		3300		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Butyl benzyl phthalate	ND		1700		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Caprolactam	ND		1700		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Carbazole	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
4-Chloroaniline	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-490598/1-A
Matrix: Solid
Analysis Batch: 490645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490598

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2-Chlorophenol	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Chrysene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Dibenz(a,h)anthracene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Dibenzofuran	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Di-n-butyl phthalate	ND		3300		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
3,3'-Dichlorobenzidine	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2,4-Dichlorophenol	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Diethyl phthalate	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2,4-Dimethylphenol	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Dimethyl phthalate	ND		670		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
4,8-Dinitro-2-methylphenol	ND		1700		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2,4-Dinitrophenol	ND		3300		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2,4-Dinitrotoluene	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2,6-Dinitrotoluene	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Di-n-octyl phthalate	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Fluoranthene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Fluorene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Hexachlorobenzene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Hexachlorobutadiene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Hexachlorocyclopentadiene	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Hexachloroethane	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Indeno[1,2,3-cd]pyrene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Isophorone	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2-Methylnaphthalene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2-Methylphenol	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Methylphenol, 3 & 4	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Naphthalene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2-Nitroaniline	ND		1700		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
3-Nitroaniline	ND		1700		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
4-Nitroaniline	ND		1700		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Nitrobenzene	ND		670		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2-Nitrophenol	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
4-Nitrophenol	ND		1700		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
N-Nitrosodiphenylamine	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
N-Nitrosodi-n-propylamine	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Pentachlorophenol	ND		1700		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Phenanthrene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Phenol	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
Pyrene	ND		67		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1
2,4,6-Trichlorophenol	ND		330		ug/Kg		02/19/25 15:17	02/20/25 09:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*44 - 105*	*02/19/25 15:17*	*02/20/25 09:58*	*1*
2-Fluorophenol	*79*		*48 - 105*	*02/19/25 15:17*	*02/20/25 09:58*	*1*
2,4,6-Tribromophenol	*68*		*34 - 108*	*02/19/25 15:17*	*02/20/25 09:58*	*1*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-490598/1-A
Matrix: Solid
Analysis Batch: 490645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490598

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	69		46 - 105	02/19/25 15:17	02/20/25 09:58	1
Phenol-d5	79		46 - 105	02/19/25 15:17	02/20/25 09:58	1
Terphenyl-d14	74		39 - 105	02/19/25 15:17	02/20/25 09:58	1

Lab Sample ID: LCS 180-490598/2-A
Matrix: Solid
Analysis Batch: 490645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490598

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	6670	4400		ug/Kg		66	50 - 100
Acenaphthylene	6670	4700		ug/Kg		71	52 - 100
Acetophenone	6670	4520		ug/Kg		68	48 - 100
Anthracene	6670	4650		ug/Kg		70	53 - 100
Atrazine	6670	4680		ug/Kg		70	49 - 103
Benzaldehyde	6670	1960		ug/Kg		30	23 - 105
Benzo[a]anthracene	6670	4850		ug/Kg		73	51 - 100
Benzo[b]fluoranthene	6670	4520		ug/Kg		68	48 - 100
Benzo[k]fluoranthene	6670	4570		ug/Kg		68	19 - 100
Benzo[g,h,i]perylene	6670	4290		ug/Kg		64	48 - 105
Benzo[a]pyrene	6670	4940		ug/Kg		74	51 - 100
1,1'-Biphenyl	6670	4430		ug/Kg		67	50 - 100
Bis(2-chloroethoxy)methane	6670	4480		ug/Kg		67	49 - 100
Bis(2-chloroethyl)ether	6670	4530		ug/Kg		68	48 - 100
2,2'-oxybis[1-chloropropane]	6670	4290		ug/Kg		64	30 - 113
Bis(2-ethylhexyl) phthalate	6670	4780		ug/Kg		72	53 - 107
4-Bromophenyl phenyl ether	6670	4530		ug/Kg		68	52 - 101
Butyl benzyl phthalate	6670	4870		ug/Kg		73	52 - 107
Caprolactam	6670	4830		ug/Kg		72	48 - 111
Carbazole	6670	4530		ug/Kg		68	53 - 100
4-Chloroaniline	6670	4900		ug/Kg		74	47 - 100
4-Chloro-3-methylphenol	6670	4870		ug/Kg		73	49 - 106
2-Chloronaphthalene	6670	4350		ug/Kg		65	51 - 100
2-Chlorophenol	6670	4890		ug/Kg		73	51 - 100
4-Chlorophenyl phenyl ether	6670	4520		ug/Kg		68	52 - 100
Chrysene	6670	4470		ug/Kg		67	50 - 100
Dibenz(a,h)anthracene	6670	4560		ug/Kg		68	50 - 107
Dibenzofuran	6870	4340		ug/Kg		65	52 - 100
Di-n-butyl phthalate	6670	4100		ug/Kg		61	57 - 102
3,3'-Dichlorobenzidine	6670	5120		ug/Kg		77	43 - 100
2,4-Dichlorophenol	6670	5210		ug/Kg		78	53 - 101
Diethyl phthalate	6670	4120		ug/Kg		62	48 - 104
2,4-Dimethylphenol	6670	5870		ug/Kg		88	51 - 101
Dimethyl phthalate	6670	4140		ug/Kg		62	53 - 100
4,6-Dinitro-2-methylphenol	13300	8640		ug/Kg		65	51 - 100
2,4-Dinitrophenol	13300	7870		ug/Kg		59	33 - 101
2,4-Dinitrotoluene	6670	4370		ug/Kg		66	54 - 104
2,6-Dinitrotoluene	6670	4200		ug/Kg		63	51 - 106
Di-n-octyl phthalate	6670	5030		ug/Kg		75	41 - 106

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-490598/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490645 — **Prep Batch: 490598**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoranthene	6670	4500		ug/Kg		67	55 - 100
Fluorene	6670	4390		ug/Kg		66	52 - 100
Hexachlorobenzene	6670	4330		ug/Kg		65	49 - 100
Hexachlorobutadiene	6670	4930		ug/Kg		74	38 - 107
Hexachlorocyclopentadiene	6670	6230		ug/Kg		94	33 - 117
Hexachloroethane	6670	4660		ug/Kg		70	47 - 100
Indeno[1,2,3-cd]pyrene	6670	4260		ug/Kg		64	51 - 103
Isophorone	6670	4370		ug/Kg		66	48 - 105
2-Methylnaphthalene	6670	4450		ug/Kg		67	53 - 100
2-Methylphenol	6670	5080		ug/Kg		76	50 - 101
Methylphenol, 3 & 4	6670	4940		ug/Kg		74	50 - 103
Naphthalene	6670	4750		ug/Kg		71	51 - 100
2-Nitroaniline	6670	4070		ug/Kg		61	42 - 123
3-Nitroaniline	6670	4730		ug/Kg		71	50 - 103
4-Nitroaniline	6670	4220		ug/Kg		63	52 - 103
Nitrobenzene	6670	4030		ug/Kg		60	44 - 108
2-Nitrophenol	6670	5410		ug/Kg		81	55 - 107
4-Nitrophenol	13300	7460		ug/Kg		56	30 - 134
N-Nitrosodiphenylamine	6670	4760		ug/Kg		71	52 - 100
N-Nitrosodi-n-propylamine	6670	4160		ug/Kg		62	45 - 107
Pentachlorophenol	13300	8140		ug/Kg		61	42 - 110
Phenanthrene	6670	4500		ug/Kg		67	53 - 100
Phenol	6670	4350		ug/Kg		65	49 - 100
Pyrene	6670	5210		ug/Kg		78	52 - 100
2,4,5-Trichlorophenol	6670	4860		ug/Kg		73	50 - 104
2,4,6-Trichlorophenol	6670	4790		ug/Kg		72	50 - 105

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*44 - 105*
2-Fluorophenol	*76*		*48 - 105*
2,4,6-Tribromophenol	*64*		*34 - 108*
Nitrobenzene-d5	*63*		*46 - 105*
Phenol-d5	*72*		*46 - 105*
Terphenyl-d14	*75*		*39 - 105*

Lab Sample ID: 180-186617-1 MS — **Client Sample ID: 250212015-06**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490645 — **Prep Batch: 490598**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		19700	15700		ug/Kg	☼	80	50 - 100
Acenaphthylene	ND		19700	17400		ug/Kg	☼	88	52 - 100
Acetophenone	ND		19700	ND		ug/Kg	☼	76	48 - 100
Anthracene	ND		19700	16800		ug/Kg	☼	85	53 - 100
Atrazine	ND		19700	ND		ug/Kg	☼	78	49 - 103
Benzaldehyde	ND	FL	19700	ND	FL	ug/Kg	☼	-7	23 - 105
Benzo[a]anthracene	ND		19700	18100		ug/Kg	☼	92	51 - 100
Benzo[b]fluoranthene	ND		19700	15700		ug/Kg	☼	75	48 - 100

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-186617-1 MS
Matrix: Solid
Analysis Batch: 490645

Client Sample ID: 250212015-06
Prep Type: Total/NA
Prep Batch: 490598

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[k]fluoranthene	ND		19700	14000		ug/Kg	☼	71	19 - 100
Benzo[g,h,i]perylene	ND	FH	19700	23600	FH	ug/Kg	☼	120	48 - 105
Benzo[a]pyrene	ND		19700	17500		ug/Kg	☼	89	61 - 100
1,1'-Biphenyl	ND		19700	17300		ug/Kg	☼	88	50 - 100
Bis(2-chloroethoxy)methane	ND		19700	16100		ug/Kg	☼	81	49 - 100
Bis(2-chloroethyl)ether	ND		19700	15300		ug/Kg	☼	78	48 - 100
2,2'-oxybis[1-chloropropane]	ND		19700	16600		ug/Kg	☼	84	30 - 113
Bis(2-ethylhexyl) phthalate	ND	FH	19700	ND	FH	ug/Kg	☼	147	53 - 107
4-Bromophenyl phenyl ether	ND		19700	16500		ug/Kg	☼	84	52 - 101
Butyl benzyl phthalate	ND		19700	ND		ug/Kg	☼	97	52 - 107
Caprolactam	ND		19700	ND		ug/Kg	☼	96	48 - 111
Carbazole	ND		19700	15200		ug/Kg	☼	77	53 - 100
4-Chloroaniline	ND		19700	ND		ug/Kg	☼	60	47 - 100
4-Chloro-3-methylphenol	ND		19700	16400		ug/Kg	☼	83	49 - 106
2-Chloronaphthalene	ND		19700	16300		ug/Kg	☼	83	51 - 100
2-Chlorophenol	ND		19700	ND		ug/Kg	☼	70	51 - 100
4-Chlorophenyl phenyl ether	ND		19700	16200		ug/Kg	☼	82	52 - 100
Chrysene	ND		19700	17300		ug/Kg	☼	88	50 - 100
Dibenz(a,h)anthracene	ND	FH	19700	23200	FH	ug/Kg	☼	117	50 - 107
Dibenzofuran	ND		19700	16200		ug/Kg	☼	82	52 - 100
Di-n-butyl phthalate	ND		19700	ND		ug/Kg	☼	NC	57 - 102
3,3'-Dichlorobenzidine	ND	FL	19700	ND	FL	ug/Kg	☼	0	43 - 100
2,4-Dichlorophenol	ND	FL	19700	10300	FL	ug/Kg	☼	52	53 - 101
Diethyl phthalate	ND		19700	16200		ug/Kg	☼	82	48 - 104
2,4-Dimethylphenol	ND	FH	19700	21100	FH	ug/Kg	☼	107	51 - 101
Dimethyl phthalate	ND	FL	19700	ND		ug/Kg	☼	86	53 - 100
4,6-Dinitro-2-methylphenol	ND	FL	39500	ND	FL	ug/Kg	☼	0	51 - 100
2,4-Dinitrophenol	ND		39500	ND		ug/Kg	☼	NC	33 - 101
2,4-Dinitrotoluene	ND		19700	15400		ug/Kg	☼	78	54 - 104
2,6-Dinitrotoluene	ND		19700	15800		ug/Kg	☼	80	51 - 106
Di-n-octyl phthalate	ND	^c	19700	16400		ug/Kg	☼	83	41 - 106
Fluoranthene	ND		19700	13600		ug/Kg	☼	64	55 - 100
Fluorene	ND		19700	16600		ug/Kg	☼	84	52 - 100
Hexachlorobenzene	ND		19700	15100		ug/Kg	☼	76	49 - 100
Hexachlorobutadiene	ND		19700	16900		ug/Kg	☼	86	38 - 107
Hexachlorocyclopentadiene	ND	FL	19700	ND	FL	ug/Kg	☼	0	33 - 117
Hexachloroethane	ND	FL	19700	ND	FL	ug/Kg	☼	37	47 - 100
Indeno[1,2,3-cd]pyrene	ND	FH	19700	21600	FH	ug/Kg	☼	110	51 - 103
Isophorone	ND		19700	16000		ug/Kg	☼	81	48 - 105
2-Methylnaphthalene	ND		19700	14600		ug/Kg	☼	74	53 - 100
2-Methylphenol	ND		19700	17500		ug/Kg	☼	89	50 - 101
Methylphenol, 3 & 4	ND	FH	19700	22300	FH	ug/Kg	☼	113	50 - 103
Naphthalene	ND		19700	17100		ug/Kg	☼	87	51 - 100
2-Nitroaniline	ND	F2	19700	ND		ug/Kg	☼	99	42 - 123
3-Nitroaniline	ND		19700	ND		ug/Kg	☼	87	50 - 103
4-Nitroaniline	ND		19700	ND		ug/Kg	☼	72	52 - 103
Nitrobenzene	ND		19700	ND		ug/Kg	☼	77	44 - 108
2-Nitrophenol	ND	FL	19700	ND	FL	ug/Kg	☼	45	55 - 107
4-Nitrophenol	ND	FL	39500	ND	FL	ug/Kg	☼	0	30 - 134

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-186617-1 MS
Matrix: Solid
Analysis Batch: 490645

Client Sample ID: 250212015-06
Prep Type: Total/NA
Prep Batch: 490598

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
N-Nitrosodiphenylamine	ND	FH	19700	19700		ug/Kg	☼	100	52 - 100
N-Nitrosodi-n-propylamine	ND		19700	15900		ug/Kg	☼	81	45 - 107
Pentachlorophenol	ND	FL	39500	ND	FL	ug/Kg	☼	0	42 - 110
Phenanthrene	ND		19700	17500		ug/Kg	☼	89	53 - 100
Phenol	ND		19700	ND		ug/Kg	☼	73	49 - 100
Pyrene	ND		19700	20000		ug/Kg	☼	96	52 - 100
2,4,5-Trichlorophenol	ND	FL	19700	ND	FL	ug/Kg	☼	34	50 - 104
2,4,6-Trichlorophenol	ND	FL	19700	ND	FL	ug/Kg	☼	0	50 - 105

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*44 - 105*
2-Fluorophenol	*61*		*48 - 105*
2,4,6-Tribromophenol	*16*	*S1-*	*34 - 108*
Nitrobenzene-d5	*79*		*46 - 105*
Phenol-d5	*81*		*46 - 105*
Terphenyl-d14	*89*		*39 - 105*

Lab Sample ID: 180-186617-1 MSD
Matrix: Solid
Analysis Batch: 490645

Client Sample ID: 250212015-06
Prep Type: Total/NA
Prep Batch: 490598

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		20100	16300		ug/Kg	☼	81	50 - 100	3	20
Acenaphthylene	ND		20100	18100		ug/Kg	☼	90	52 - 100	4	20
Acetophenone	ND		20100	ND		ug/Kg	☼	79	48 - 100	5	17
Anthracene	ND		20100	17800		ug/Kg	☼	89	53 - 100	6	20
Atrazine	ND		20100	ND		ug/Kg	☼	70	49 - 103	8	19
Benzaldehyde	ND	FL	20100	ND	FL	ug/Kg	☼	9	23 - 105	12	31
Benzo[a]anthracene	ND		20100	18200		ug/Kg	☼	91	51 - 100	1	21
Benzo[b]fluoranthene	ND		20100	15300		ug/Kg	☼	72	48 - 100	2	20
Benzo[k]fluoranthene	ND		20100	15400		ug/Kg	☼	76	19 - 100	9	20
Benzo[g,h,i]perylene	ND	FH	20100	23800	FH	ug/Kg	☼	118	48 - 105	1	19
Benzo[a]pyrene	ND		20100	17800		ug/Kg	☼	89	51 - 100	2	20
1,1'-Biphenyl	ND		20100	17900		ug/Kg	☼	89	50 - 100	4	19
Bis(2-chloroethoxy)methane	ND		20100	16600		ug/Kg	☼	82	49 - 100	3	20
Bis(2-chloroethyl)ether	ND		20100	16400		ug/Kg	☼	81	48 - 100	6	16
2,2'-oxybis[1-chloropropane]	ND		20100	17300		ug/Kg	☼	86	30 - 113	4	17
Bis(2-ethylhexyl) phthalate	ND	FH	20100	ND	FH	ug/Kg	☼	144	53 - 107	0	20
4-Bromophenyl phenyl ether	ND		20100	16800		ug/Kg	☼	84	52 - 101	2	20
Butyl benzyl phthalate	ND		20100	ND		ug/Kg	☼	98	52 - 107	3	19
Caprolactam	ND		20100	ND		ug/Kg	☼	95	48 - 111	1	23
Carbazole	ND		20100	15900		ug/Kg	☼	79	53 - 100	4	20
4-Chloroaniline	ND		20100	ND		ug/Kg	☼	58	47 - 100	1	20
4-Chloro-3-methylphenol	ND		20100	15300		ug/Kg	☼	76	49 - 106	7	20
2-Chloronaphthalene	ND		20100	17300		ug/Kg	☼	86	51 - 100	6	20
2-Chlorophenol	ND		20100	ND		ug/Kg	☼	73	51 - 100	5	17
4-Chlorophenyl phenyl ether	ND		20100	16700		ug/Kg	☼	83	52 - 100	3	19
Chrysene	ND		20100	17500		ug/Kg	☼	87	50 - 100	1	20

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-186617-1 MSD — **Client Sample ID: 250212015-06**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490645 — **Prep Batch: 490598**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenz(a,h)anthracene	ND	FH	20100	23000	FH	ug/Kg	☼	114	50 - 107	1	21
Dibenzofuran	ND		20100	16500		ug/Kg	☼	82	52 - 100	2	19
Di-n-butyl phthalate	ND		20100	ND		ug/Kg	☼	NC	57 - 102	NC	20
3,3'-Dichlorobenzidine	ND	FL	20100	ND	FL	ug/Kg	☼	0	43 - 100	NC	19
2,4-Dichlorophenol	ND	FL	20100	10000	FL	ug/Kg	☼	50	53 - 101	3	22
Diethyl phthalate	ND		20100	16700		ug/Kg	☼	83	48 - 104	3	20
2,4-Dimethylphenol	ND	FH	20100	21600	FH	ug/Kg	☼	108	51 - 101	3	32
Dimethyl phthalate	ND	FL	20100	ND	FL	ug/Kg	☼	0	53 - 100	NC	21
4,6-Dinitro-2-methylphenol	ND	FL	40200	ND	FL	ug/Kg	☼	0	51 - 100	NC	22
2,4-Dinitrophenol	ND		40200	ND		ug/Kg	☼	NC	33 - 101	NC	20
2,4-Dinitrotoluene	ND		20100	15300		ug/Kg	☼	76	54 - 104	0	20
2,6-Dinitrotoluene	ND		20100	18400		ug/Kg	☼	91	51 - 106	15	20
Di-n-octyl phthalate	ND	^c	20100	16400		ug/Kg	☼	82	41 - 106	0	18
Fluoranthene	ND		20100	14300		ug/Kg	☼	66	55 - 100	5	20
Fluorene	ND		20100	16700		ug/Kg	☼	83	52 - 100	0	19
Hexachlorobenzene	ND		20100	15400		ug/Kg	☼	77	49 - 100	2	20
Hexachlorobutadiene	ND		20100	17700		ug/Kg	☼	88	38 - 107	4	22
Hexachlorocyclopentadiene	ND	FL	20100	ND	FL	ug/Kg	☼	0	33 - 117	NC	19
Hexachloroethane	ND	FL	20100	ND	FL	ug/Kg	☼	40	47 - 100	10	17
Indeno[1,2,3-cd]pyrene	ND	FH	20100	21100	FH	ug/Kg	☼	105	51 - 103	2	19
Isophorone	ND		20100	17100		ug/Kg	☼	85	48 - 105	7	20
2-Methylnaphthalene	ND		20100	15700		ug/Kg	☼	78	53 - 100	7	21
2-Methylphenol	ND		20100	19500		ug/Kg	☼	97	50 - 101	11	17
Methylphenol, 3 & 4	ND	FH	20100	23300	FH	ug/Kg	☼	116	50 - 103	4	19
Naphthalene	ND		20100	18000		ug/Kg	☼	90	51 - 100	5	20
2-Nitroaniline	ND	F2	20100	ND	F2	ug/Kg	☼	77	42 - 123	22	19
3-Nitroaniline	ND		20100	ND		ug/Kg	☼	94	50 - 103	10	20
4-Nitroaniline	ND		20100	ND		ug/Kg	☼	75	52 - 103	5	18
Nitrobenzene	ND		20100	ND		ug/Kg	☼	81	44 - 108	7	21
2-Nitrophenol	ND	FL	20100	ND	FL	ug/Kg	☼	44	55 - 107	1	19
4-Nitrophenol	ND	FL	40200	ND	FL	ug/Kg	☼	0	30 - 134	NC	18
N-Nitrosodiphenylamine	ND	FH	20100	20300	FH	ug/Kg	☼	101	52 - 100	3	20
N-Nitrosodi-n-propylamine	ND		20100	17000		ug/Kg	☼	84	45 - 107	6	18
Pentachlorophenol	ND	FL	40200	ND	FL	ug/Kg	☼	0	42 - 110	NC	20
Phenanthrene	ND		20100	17500		ug/Kg	☼	87	53 - 100	0	20
Phenol	ND		20100	16300		ug/Kg	☼	81	49 - 100	13	16
Pyrene	ND		20100	20600		ug/Kg	☼	97	52 - 100	3	20
2,4,5-Trichlorophenol	ND	FL	20100	ND	FL	ug/Kg	☼	27	50 - 104	20	21
2,4,6-Trichlorophenol	ND	FL	20100	ND	FL	ug/Kg	☼	0	50 - 105	NC	21

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*44 - 105*
2-Fluorophenol	*62*		*48 - 105*
2,4,6-Tribromophenol	*15*	*S1-*	*34 - 108*
Nitrobenzene-d5	*84*		*46 - 105*
Phenol-d5	*86*		*46 - 105*
Terphenyl-d14	*93*		*39 - 105*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB2 180-490418/1-B
Matrix: Solid
Analysis Batch: 490590

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 490551

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
Pyridine	ND		0.10		mg/L		02/19/25 09:19	02/19/25 16:42	1
2,4-Dinitrotoluene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
Hexachlorobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
Hexachlorobutadiene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
Hexachloroethane	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
2-Methylphenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
Methylphenol, 3 & 4	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
Nitrobenzene	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
Pentachlorophenol	ND		0.25		mg/L		02/19/25 09:19	02/19/25 16:42	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		02/19/25 09:19	02/19/25 16:42	1

Surrogate	*LB2 %Recovery*	*LB2 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*10 - 130*	*02/19/25 09:19*	*02/19/25 16:42*	*1*
2-Fluorophenol	*36*		*10 - 130*	*02/19/25 09:19*	*02/19/25 16:42*	*1*
2,4,6-Tribromophenol	*73*		*10 - 130*	*02/19/25 09:19*	*02/19/25 16:42*	*1*
Nitrobenzene-d5	*49*		*10 - 130*	*02/19/25 09:19*	*02/19/25 16:42*	*1*
Phenol-d5	*29*		*10 - 130*	*02/19/25 09:19*	*02/19/25 16:42*	*1*
Terphenyl-d14	*79*		*10 - 130*	*02/19/25 09:19*	*02/19/25 16:42*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-490453/1-A
Matrix: Solid
Analysis Batch: 490727

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490453

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
alpha-BHC	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
beta-BHC	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
delta-BHC	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
gamma-BHC (Lindane)	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
cis-Chlordane	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
trans-Chlordane	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
4,4'-DDD	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Chlordane (technical)	ND		17		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
4,4'-DDE	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
4,4'-DDT	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Dieldrin	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Endosulfan I	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Endosulfan II	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Endosulfan sulfate	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Endrin	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Endrin aldehyde	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Endrin ketone	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Heptachlor	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Heptachlor epoxide	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 180-490453/1-A
Matrix: Solid
Analysis Batch: 490727

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490453

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	ND		1.7		ug/Kg		02/18/25 07:04	02/21/25 15:45	1
Toxaphene	ND		67		ug/Kg		02/18/25 07:04	02/21/25 15:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*108*		*69 - 124*	*02/18/25 07:04*	*02/21/25 15:45*	*1*
Tetrachloro-m-xylene	*100*		*69 - 124*	*02/18/25 07:04*	*02/21/25 15:45*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*65 - 134*	*02/18/25 07:04*	*02/21/25 15:45*	*1*
DCB Decachlorobiphenyl (Surr)	*88*		*65 - 134*	*02/18/25 07:04*	*02/21/25 15:45*	*1*

Lab Sample ID: LCS 180-490453/2-A
Matrix: Solid
Analysis Batch: 490727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490453

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	33.3	38.5		ug/Kg		115	60 - 115
Aldrin	33.3	34.0		ug/Kg		102	60 - 115
alpha-BHC	33.3	34.2		ug/Kg		103	67 - 108
beta-BHC	33.3	33.2		ug/Kg		100	53 - 113
beta-BHC	33.3	31.7		ug/Kg		95	53 - 113
delta-BHC	33.3	31.9		ug/Kg		96	41 - 105
delta-BHC	33.3	30.8		ug/Kg		92	41 - 105
gamma-BHC (Lindane)	33.3	36.1		ug/Kg		108	64 - 109
gamma-BHC (Lindane)	33.3	33.0		ug/Kg		99	64 - 109
cis-Chlordane	33.3	37.4		ug/Kg		112	57 - 112
cis-Chlordane	33.3	33.7		ug/Kg		101	57 - 112
trans-Chlordane	33.3	34.0		ug/Kg		102	59 - 113
4,4'-DDD	33.3	28.7		ug/Kg		86	50 - 142
4,4'-DDE	33.3	29.0		ug/Kg		87	64 - 132
4,4'-DDE	33.3	27.4		ug/Kg		82	64 - 132
4,4'-DDT	33.3	29.6		ug/Kg		89	54 - 129
Dieldrin	33.3	32.2		ug/Kg		97	66 - 133
Dieldrin	33.3	29.9		ug/Kg		90	68 - 133
Endosulfan I	33.3	32.1		ug/Kg		96	64 - 114
Endosulfan II	33.3	30.9		ug/Kg		93	70 - 130
Endosulfan II	33.3	30.1		ug/Kg		90	70 - 130
Endosulfan sulfate	33.3	30.2		ug/Kg		90	57 - 132
Endrin	33.3	34.9		ug/Kg		105	66 - 138
Endrin	33.3	32.0		ug/Kg		96	66 - 138
Endrin aldehyde	33.3	28.0		ug/Kg		84	66 - 150
Endrin ketone	33.3	31.5		ug/Kg		95	69 - 129
Heptachlor	33.3	35.5		ug/Kg		106	62 - 115
Heptachlor epoxide	33.3	35.1		ug/Kg		105	65 - 115
Methoxychlor	33.3	34.2		ug/Kg		103	48 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*113*		*69 - 124*
Tetrachloro-m-xylene	*105*		*69 - 124*
DCB Decachlorobiphenyl (Surr)	*91*		*65 - 134*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-490453/2-A
Matrix: Solid
Analysis Batch: 490727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490453

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*90*		*65 - 134*

Lab Sample ID: 180-186639-A-1-A MS
Matrix: Solid
Analysis Batch: 490727

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 490453

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	ND		32.5	28.4		ug/Kg		87	60 - 115
alpha-BHC	ND		32.5	28.1		ug/Kg		86	67 - 108
beta-BHC	ND		32.5	25.9		ug/Kg		80	53 - 113
delta-BHC	ND		32.5	24.9		ug/Kg		77	41 - 105
gamma-BHC (Lindane)	ND		32.5	28.0		ug/Kg		86	64 - 109
cis-Chlordane	ND		32.5	27.7		ug/Kg		85	57 - 112
trans-Chlordane	ND		32.5	28.2		ug/Kg		87	59 - 113
4,4'-DDD	ND		32.5	26.8		ug/Kg		82	50 - 142
4,4'-DDE	ND		32.5	22.5		ug/Kg		69	64 - 132
4,4'-DDT	ND		32.5	22.7		ug/Kg		70	54 - 129
Dieldrin	ND		32.5	27.6		ug/Kg		85	68 - 133
Endosulfan I	ND		32.5	24.9		ug/Kg		77	64 - 114
Endosulfan II	ND		32.5	26.5		ug/Kg		82	70 - 130
Endosulfan sulfate	ND		32.5	25.9		ug/Kg		80	57 - 132
Endrin	ND		32.5	30.4		ug/Kg		94	66 - 138
Endrin aldehyde	ND	FL	32.5	19.7	FL	ug/Kg		61	66 - 150
Endrin ketone	ND		32.5	26.3		ug/Kg		81	69 - 129
Heptachlor	ND		32.5	29.0		ug/Kg		89	62 - 115
Heptachlor epoxide	ND		32.5	29.1		ug/Kg		90	85 - 115
Methoxychlor	ND		32.5	25.3		ug/Kg		78	48 - 129

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*87*		*69 - 124*
Tetrachloro-m-xylene	*78*		*69 - 124*
DCB Decachlorobiphenyl (Surr)	*79*		*65 - 134*
DCB Decachlorobiphenyl (Surr)	*78*		*65 - 134*

Lab Sample ID: 180-186639-A-1-B MSD
Matrix: Solid
Analysis Batch: 490727

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 490453

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	ND		32.3	30.4		ug/Kg		94	60 - 115	7	15
alpha-BHC	ND		32.3	29.8		ug/Kg		92	67 - 108	8	15
beta-BHC	ND		32.3	27.1		ug/Kg		84	53 - 113	5	17
delta-BHC	ND		32.3	24.3		ug/Kg		75	41 - 105	2	16
gamma-BHC (Lindane)	ND		32.3	29.7		ug/Kg		92	64 - 109	6	15
cis-Chlordane	ND		32.3	29.9		ug/Kg		93	57 - 112	8	22
trans-Chlordane	ND		32.3	30.7		ug/Kg		95	59 - 113	8	22
4,4'-DDD	ND		32.3	27.1		ug/Kg		84	50 - 142	1	18
4,4'-DDE	ND		32.3	24.4		ug/Kg		76	64 - 132	8	18

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-186639-A-1-B MSD
Matrix: Solid
Analysis Batch: 490727

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 490453

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,4'-DDT	ND		32.3	24.4		ug/Kg		76	54 - 129	7	18
Dieldrin	ND		32.3	28.2		ug/Kg		87	68 - 133	2	18
Endosulfan I	ND		32.3	28.2		ug/Kg		87	64 - 114	13	18
Endosulfan II	ND		32.3	25.6		ug/Kg		80	70 - 130	3	18
Endosulfan sulfate	ND		32.3	24.5		ug/Kg		76	57 - 132	6	19
Endrin	ND		32.3	30.6		ug/Kg		95	66 - 138	0	17
Endrin aldehyde	ND	FL	32.3	17.7	FL	ug/Kg		55	66 - 150	11	19
Endrin ketone	ND		32.3	26.9		ug/Kg		83	69 - 129	2	19
Heptachlor	ND		32.3	31.0		ug/Kg		96	62 - 115	7	16
Heptachlor epoxide	ND		32.3	31.2		ug/Kg		97	65 - 115	7	16
Methoxychlor	ND		32.3	26.6		ug/Kg		83	48 - 129	5	22

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*82*		*69 - 124*
Tetrachloro-m-xylene	*76*		*69 - 124*
DCB Decachlorobiphenyl (Surr)	*83*		*65 - 134*
DCB Decachlorobiphenyl (Surr)	*84*		*65 - 134*

Lab Sample ID: MB 180-490554/1-A
Matrix: Solid
Analysis Batch: 490643

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490554

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 05:39	1
Chlordane (technical)	ND		0.0050		mg/L		02/19/25 09:22	02/21/25 05:39	1
Endrin	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 05:39	1
Heptachlor	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 05:39	1
Heptachlor epoxide	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 05:39	1
Methoxychlor	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 05:39	1
Toxaphene	ND		0.040		mg/L		02/19/25 09:22	02/21/25 05:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*96*		*56 - 134*	*02/19/25 09:22*	*02/21/25 05:39*	*1*
Tetrachloro-m-xylene	*88*		*56 - 134*	*02/19/25 09:22*	*02/21/25 05:39*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*64 - 132*	*02/19/25 09:22*	*02/21/25 05:39*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*64 - 132*	*02/19/25 09:22*	*02/21/25 05:39*	*1*

Lab Sample ID: LCS 180-490554/2-A
Matrix: Solid
Analysis Batch: 490643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490554

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-BHC (Lindane)	0.0100	0.00937		mg/L		94	62 - 108
Endrin	0.0100	0.00909		mg/L		91	72 - 124
Heptachlor	0.0100	0.00992		mg/L		99	53 - 119
Heptachlor epoxide	0.0100	0.0102		mg/L		102	63 - 117
Methoxychlor	0.0100	0.00856		mg/L		86	46 - 127

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-490554/2-A
Matrix: Solid
Analysis Batch: 490643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490554

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*94*		*56 - 134*
Tetrachloro-m-xylene	*88*		*56 - 134*
DCB Decachlorobiphenyl (Surr)	*82*		*64 - 132*
DCB Decachlorobiphenyl (Surr)	*82*		*64 - 132*

Lab Sample ID: LCSD 180-490554/3-A
Matrix: Solid
Analysis Batch: 490643

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 490554

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
gamma-BHC (Lindane)	0.0100	0.00981		mg/L		98	62 - 108	5	16
Endrin	0.0100	0.00950		mg/L		95	72 - 124	4	15
Heptachlor	0.0100	0.0104		mg/L		104	53 - 119	5	16
Heptachlor epoxide	0.0100	0.0108		mg/L		106	63 - 117	5	17
Methoxychlor	0.0100	0.00880		mg/L		88	46 - 127	3	18

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*100*		*56 - 134*
Tetrachloro-m-xylene	*91*		*56 - 134*
DCB Decachlorobiphenyl (Surr)	*86*		*64 - 132*
DCB Decechlorobiphenyl (Surr)	*85*		*64 - 132*

Lab Sample ID: LB2 180-490418/1-C
Matrix: Solid
Analysis Batch: 490643

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 490554

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:51	1
Chlordane (technical)	ND		0.0050		mg/L		02/19/25 09:22	02/21/25 06:51	1
Endrin	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:51	1
Heptachlor	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:51	1
Heptachlor epoxide	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:51	1
Methoxychlor	ND		0.00050		mg/L		02/19/25 09:22	02/21/25 06:51	1
Toxaphene	ND		0.040		mg/L		02/19/25 09:22	02/21/25 06:51	1

Surrogate	*LB2 %Recovery*	*LB2 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*56 - 134*	*02/19/25 09:22*	*02/21/25 06:51*	*1*
Tetrachloro-m-xylene	*71*		*56 - 134*	*02/19/25 09:22*	*02/21/25 06:51*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*64 - 132*	*02/19/25 09:22*	*02/21/25 06:51*	*1*
DCB Decachlorobiphenyl (Surr)	*77*		*64 - 132*	*02/19/25 09:22*	*02/21/25 06:51*	*1*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-490393/1-A
Matrix: Solid
Analysis Batch: 490461

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		02/17/25 07:12	02/18/25 11:45	1
PCB-1221	ND		17		ug/Kg		02/17/25 07:12	02/18/25 11:45	1
PCB-1232	ND		17		ug/Kg		02/17/25 07:12	02/18/25 11:45	1
PCB-1242	ND		17		ug/Kg		02/17/25 07:12	02/18/25 11:45	1
PCB-1248	ND		17		ug/Kg		02/17/25 07:12	02/18/25 11:45	1
PCB-1254	ND		17		ug/Kg		02/17/25 07:12	02/18/25 11:45	1
PCB-1260	ND		17		ug/Kg		02/17/25 07:12	02/18/25 11:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*79*		*60 - 135*	*02/17/25 07:12*	*02/18/25 11:45*	*1*
Tetrachloro-m-xylene (Surr)	*78*		*60 - 135*	*02/17/25 07:12*	*02/18/25 11:45*	*1*
DCB Decachlorobiphenyl (Surr)	*66*		*57 - 146*	*02/17/25 07:12*	*02/18/25 11:45*	*1*
DCB Decachlorobiphenyl (Surr)	*78*		*57 - 146*	*02/17/25 07:12*	*02/18/25 11:45*	*1*

Lab Sample ID: LCS 180-490393/2-A
Matrix: Solid
Analysis Batch: 490461

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1050		ug/Kg		79	48 - 132
PCB-1260	1330	988		ug/Kg		74	45 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*79*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*78*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*65*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*80*		*57 - 146*

Lab Sample ID: 180-186503-A-141-A MS
Matrix: Solid
Analysis Batch: 490461

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 490393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND	F2 FL	1320	1020		ug/Kg		78	48 - 132
PCB-1260	ND		1320	1010		ug/Kg		76	45 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*72*		*60 - 135*
Tetrachloro-m-xylene (Surr)	*66*		*60 - 135*
DCB Decachlorobiphenyl (Surr)	*68*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*79*		*57 - 146*

Lab Sample ID: 180-186503-A-141-B MSD
Matrix: Solid
Analysis Batch: 490461

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 490393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND	F2 FL	1310	785	F2	ug/Kg		60	48 - 132	26	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-186503-A-141-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490461 — **Prep Batch: 490393**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		1310	887		ug/Kg		67	45 - 128	13	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*52*	*S1-*	*60 - 135*
Tetrachloro-m-xylene (Surr)	*59*	*S1-*	*60 - 135*
DCB Decachlorobiphenyl (Surr)	*58*		*57 - 146*
DCB Decachlorobiphenyl (Surr)	*75*		*57 - 146*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-490525/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490615 — **Prep Batch: 490525**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		80		ug/Kg		02/18/25 22:18	02/20/25 04:59	1
2,4,5-T	ND		20		ug/Kg		02/18/25 22:18	02/20/25 04:59	1
Silvex (2,4,5-TP)	ND		20		ug/Kg		02/18/25 22:18	02/20/25 04:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*40*		*21 - 127*	*02/18/25 22:18*	*02/20/25 04:59*	*1*
2,4-Dichlorophenylacetic acid	*41*		*21 - 127*	*02/18/25 22:18*	*02/20/25 04:59*	*1*

Lab Sample ID: LCS 180-490525/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490615 — **Prep Batch: 490525**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	400	259		ug/Kg		65	13 - 139
2,4,5-T	100	71.9		ug/Kg		72	11 - 150
Silvex (2,4,5-TP)	100	70.5		ug/Kg		70	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*64*		*21 - 127*
2,4-Dichlorophenylacetic acid	*65*		*21 - 127*

Lab Sample ID: LCSD 180-490525/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490615 — **Prep Batch: 490525**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	400	284		ug/Kg		71	13 - 139	9	40
2,4,5-T	100	77.0		ug/Kg		77	11 - 150	7	40
Silvex (2,4,5-TP)	100	74.4		ug/Kg		74	10 - 150	5	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*66*		*21 - 127*
2,4-Dichlorophenylacetic acid	*67*		*21 - 127*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: 240-218800-L-2-A MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490615 — **Prep Batch: 490525**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	ND		402	223		ug/Kg	☼	55	13 - 139	15	40
2,4,5-T	ND	^c	101	63.0		ug/Kg	☼	63	11 - 150	14	40
Silvex (2,4,5-TP)	ND	^c	101	59.6		ug/Kg	☼	59	10 - 150	17	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*51*		*21 - 127*
2,4-Dichlorophenylacetic acid	*52*		*21 - 127*

Lab Sample ID: 240-218800-M-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490615 — **Prep Batch: 490525**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	ND		402	259		ug/Kg	☼	64	13 - 139
2,4,5-T	ND	^c	101	72.6		ug/Kg	☼	72	11 - 150
Silvex (2,4,5-TP)	ND	^c	101	70.9		ug/Kg	☼	70	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*62*		*21 - 127*
2,4-Dichlorophenylacetic acid	*63*		*21 - 127*

Lab Sample ID: MB 180-490614/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490719 — **Prep Batch: 490614**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040		mg/L		02/20/25 00:51	02/21/25 08:47	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		02/20/25 00:51	02/21/25 08:47	20

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*66*		*21 - 127*	*02/20/25 00:51*	*02/21/25 08:47*	*20*
2,4-Dichlorophenylacetic acid	*67*		*21 - 127*	*02/20/25 00:51*	*02/21/25 08:47*	*20*

Lab Sample ID: LCS 180-490614/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490719 — **Prep Batch: 490614**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	0.200	0.110		mg/L		55	13 - 139
Silvex (2,4,5-TP)	0.0500	0.0301		mg/L		60	10 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*58*		*21 - 127*
2,4-Dichlorophenylacetic acid	*58*		*21 - 127*

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 180-490614/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490719 — **Prep Batch: 490614**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	0.200	0.118		mg/L		59	13 - 139	7	40
Silvex (2,4,5-TP)	0.0500	0.0323		mg/L		65	10 - 150	7	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*60*		*21 - 127*
2,4-Dichlorophenylacetic acid	*61*		*21 - 127*

Lab Sample ID: LB2 180-490418/1-D — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 490719 — **Prep Batch: 490614**

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040		mg/L		02/20/25 00:51	02/21/25 10:06	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		02/20/25 00:51	02/21/25 10:06	20

Surrogate	*LB2 %Recovery*	*LB2 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*60*		*21 - 127*	*02/20/25 00:51*	*02/21/25 10:06*	*20*
2,4-Dichlorophenylacetic acid	*59*		*21 - 127*	*02/20/25 00:51*	*02/21/25 10:06*	*20*

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-490480/6 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490480

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			02/18/25 12:13	1
Nitrate as N	ND		0.10		mg/L			02/18/25 12:13	1

Lab Sample ID: LCS 180-490480/7 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490480

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	49.0		mg/L		98	80 - 120
Nitrate as N	2.50	2.62		mg/L		105	80 - 120

Lab Sample ID: 180-186626-E-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490480

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	21		50.0	72.0		mg/L		102	80 - 120
Nitrate as N	ND		2.50	2.62		mg/L		105	80 - 120

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-186626-E-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490480

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	21		50.0	71.8		mg/L		102	80 - 120	0	15
Nitrate as N	ND		2.50	2.61		mg/L		105	80 - 120	0	15

Lab Sample ID: LB 180-490403/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 490480

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			02/18/25 14:28	1
Nitrate as N	ND		0.10		mg/L			02/18/25 14:28	1

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 410-610438/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 611006 — **Prep Batch: 610438**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0		pg/g		02/26/25 13:11	02/28/25 01:14	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*57*		*40 - 135*	*02/26/25 13:11*	*02/28/25 01:14*	*1*

Lab Sample ID: LCS 410-610438/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 610901 — **Prep Batch: 610438**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,3,7,8-TCDD	20.0	22.2		pg/g		111	66 - 120

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*85*		*40 - 135*

Lab Sample ID: LCSD 410-610438/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 610901 — **Prep Batch: 610438**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,3,7,8-TCDD	20.0	18.1		pg/g		90	66 - 120	20	25

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*66*		*40 - 135*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-609071/1-A
Matrix: Solid
Analysis Batch: 609375

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 609071

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		5.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Sulfur	ND		50		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Arsenic	ND		5.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Barium	ND		0.50		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Beryllium	ND		0.50		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Boron	ND		20		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Cadmium	ND		0.50		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Chromium	ND		1.5		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Copper	ND		2.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Lead	ND		1.5		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Molybdenum	ND		1.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Nickel	ND		1.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Selenium	ND		5.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Silver	ND		1.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Sodium	ND		100		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Thallium	ND		3.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1
Zinc	ND		2.0		mg/Kg		02/23/25 22:00	02/24/25 10:13	1

Lab Sample ID: LCS 410-609071/2-A
Matrix: Solid
Analysis Batch: 609375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 609071

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	10.0	9.14		mg/Kg		91	80 - 120
Sulfur	500	461		mg/Kg		92	89 - 110
Arsenic	50.0	46.0		mg/Kg		92	90 - 113
Barium	50.0	49.3		mg/Kg		99	90 - 111
Beryllium	5.00	4.95		mg/Kg		99	90 - 113
Boron	50.0	47.0		mg/Kg		94	80 - 120
Cadmium	5.00	4.72		mg/Kg		94	90 - 110
Chromium	50.0	48.4		mg/Kg		97	90 - 113
Copper	50.0	48.3		mg/Kg		97	90 - 110
Lead	5.00	4.81		mg/Kg		96	85 - 116
Molybdenum	5.00	4.79		mg/Kg		96	80 - 120
Nickel	50.0	48.0		mg/Kg		96	90 - 111
Selenium	10.0	9.70		mg/Kg		97	81 - 119
Silver	5.00	4.81		mg/Kg		96	86 - 112
Sodium	500	487		mg/Kg		97	88 - 114
Thallium	10.0	9.41		mg/Kg		94	80 - 117
Zinc	50.0	48.2		mg/Kg		96	90 - 110

Lab Sample ID: 410-206616-D-20-AB MS
Matrix: Solid
Analysis Batch: 609375

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 609071

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		14.3	11.0		mg/Kg	☼	76	75 - 125
Sulfur	290		716	1110		mg/Kg	☼	115	75 - 125
Arsenic	9.3		71.6	74.6		mg/Kg	☼	91	75 - 125

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 410-206616-D-20-AB MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609375 — **Prep Batch: 609071**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Barium	65	FH	71.6	174	FH	mg/Kg	☼	152	75 - 125
Beryllium	ND		7.16	7.67		mg/Kg	☼	99	75 - 125
Boron	ND		71.6	71.7		mg/Kg	☼	92	75 - 125
Cadmium	ND		7.16	6.86		mg/Kg	☼	93	75 - 125
Chromium	17		71.6	98.0		mg/Kg	☼	113	75 - 125
Copper	21		71.6	102		mg/Kg	☼	113	75 - 125
Lead	41	4 F2	7.16	85.1	4	mg/Kg	☼	614	75 - 125
Molybdenum	ND		7.16	7.03		mg/Kg	☼	98	75 - 125
Nickel	13		71.6	84.0		mg/Kg	☼	99	75 - 125
Selenium	ND		14.3	13.7		mg/Kg	☼	95	75 - 125
Silver	ND		7.16	7.00		mg/Kg	☼	98	75 - 125
Sodium	ND		716	885		mg/Kg	☼	108	75 - 125
Thallium	ND		14.3	13.6		mg/Kg	☼	95	75 - 125
Zinc	110	FH	71.6	217	FH	mg/Kg	☼	153	75 - 125

Lab Sample ID: 410-206616-D-20-AC MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609375 — **Prep Batch: 609071**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		14.3	12.1		mg/Kg	☼	85	75 - 125	10	20
Sulfur	290		716	1080		mg/Kg	☼	110	75 - 125	3	20
Arsenic	9.3		71.6	76.2		mg/Kg	☼	93	75 - 125	2	20
Barium	65	FH	71.6	162	FH	mg/Kg	☼	135	75 - 125	7	20
Beryllium	ND		7.18	7.59		mg/Kg	☼	98	75 - 125	1	20
Boron	ND		71.6	71.0		mg/Kg	☼	92	75 - 125	1	20
Cadmium	ND		7.16	6.84		mg/Kg	☼	92	75 - 125	0	20
Chromium	17		71.6	90.1		mg/Kg	☼	102	75 - 125	8	20
Copper	21		71.6	95.9		mg/Kg	☼	105	75 - 125	6	20
Lead	41	4 F2	7.16	57.5	4 F2	mg/Kg	☼	228	75 - 125	39	20
Molybdenum	ND		7.16	6.87		mg/Kg	☼	96	75 - 125	2	20
Nickel	13		71.6	83.0		mg/Kg	☼	98	75 - 125	1	20
Selenium	ND		14.3	14.3		mg/Kg	☼	100	75 - 125	5	20
Silver	ND		7.16	7.06		mg/Kg	☼	99	75 - 125	1	20
Sodium	ND		716	859		mg/Kg	☼	107	75 - 125	1	20
Thallium	ND		14.3	13.3		mg/Kg	☼	93	75 - 125	3	20
Zinc	110	FH	71.6	209	FH	mg/Kg	☼	142	75 - 125	4	20

Lab Sample ID: 410-206616-D-20-AA DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609375 — **Prep Batch: 609071**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		ND		mg/Kg	☼	NC	20
Sulfur	290		405	F3	mg/Kg	☼	33	20
Arsenic	9.3		8.96		mg/Kg	☼	3	20
Barium	65	FH	71.6		mg/Kg	☼	9	20
Beryllium	ND		ND		mg/Kg	☼	NC	20
Boron	ND		ND		mg/Kg	☼	NC	20

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 410-206616-D-20-AA DU
Matrix: Solid
Analysis Batch: 609375

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 609071

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	17		18.3		mg/Kg	☼	8	20
Copper	21		25.9	F3	mg/Kg	☼	21	20
Lead	41	4 F2	46.0		mg/Kg	☼	11	20
Molybdenum	ND		ND		mg/Kg	☼	NC	20
Nickel	13		15.2		mg/Kg	☼	16	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Silver	ND		ND		mg/Kg	☼	NC	20
Sodium	ND		ND		mg/Kg	☼	NC	20
Thallium	ND		ND		mg/Kg	☼	NC	20
Zinc	110	FH	129		mg/Kg	☼	19	20

Lab Sample ID: MB 410-609076/1-A
Matrix: Solid
Analysis Batch: 609349

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 609076

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		02/23/25 21:30	02/24/25 09:31	1

Lab Sample ID: LCS 410-609076/2-A
Matrix: Solid
Analysis Batch: 609349

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 609076

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	5.00	5.13		mg/L		103	83 - 119

Lab Sample ID: 180-186617-1 MS
Matrix: Solid
Analysis Batch: 609349

Client Sample ID: 250212015-06
Prep Type: TCLP
Prep Batch: 609076

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND		5.00	5.00		mg/L		96	75 - 125

Lab Sample ID: 180-186660-A-1-F DU
Matrix: Solid
Analysis Batch: 609349

Client Sample ID: Duplicate
Prep Type: TCLP
Prep Batch: 609076

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	ND		ND		mg/L		NC	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-609076/1-A
Matrix: Solid
Analysis Batch: 610504

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 609076

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.25		mg/L		02/23/25 21:30	02/26/25 09:17	1
Arsenic	ND		0.020		mg/L		02/23/25 21:30	02/26/25 09:17	1
Barium	ND		0.020		mg/L		02/23/25 21:30	02/26/25 09:17	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-609076/1-A
Matrix: Solid
Analysis Batch: 610504

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 609076

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0050		mg/L		02/23/25 21:30	02/26/25 09:17	1
Chromium	ND		0.020		mg/L		02/23/25 21:30	02/26/25 09:17	1
Copper	ND		0.010		mg/L		02/23/25 21:30	02/26/25 09:17	1
Silver	ND		0.0050		mg/L		02/23/25 21:30	02/26/25 09:17	1
Molybdenum	ND		0.0050		mg/L		02/23/25 21:30	02/26/25 09:17	1
Nickel	ND		0.010		mg/L		02/23/25 21:30	02/26/25 09:17	1
Lead	ND		0.0050		mg/L		02/23/25 21:30	02/26/25 09:17	1
Antimony	ND		0.010		mg/L		02/23/25 21:30	02/26/25 09:17	1
Selenium	ND		0.010		mg/L		02/23/25 21:30	02/26/25 09:17	1
Zinc	ND		0.10		mg/L		02/23/25 21:30	02/26/25 09:17	1

Lab Sample ID: LCS 410-609076/2-A
Matrix: Solid
Analysis Batch: 610504

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 609076

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	50.0	47.8		mg/L		96	90 - 110
Arsenic	5.00	4.88		mg/L		98	90 - 109
Barium	5.00	4.99		mg/L		100	90 - 113
Cadmium	0.500	0.505		mg/L		101	90 - 112
Chromium	5.00	4.84		mg/L		97	90 - 110
Copper	5.00	4.93		mg/L		99	90 - 110
Silver	0.500	0.503		mg/L		101	90 - 112
Molybdenum	0.500	0.505		mg/L		101	90 - 115
Nickel	5.00	4.79		mg/L		96	90 - 109
Lead	0.500	0.496		mg/L		99	90 - 110
Antimony	1.00	0.997		mg/L		100	90 - 115
Selenium	1.00	0.992		mg/L		99	90 - 110
Zinc	5.00	4.99		mg/L		100	90 - 112

Lab Sample ID: 180-186617-1 MS
Matrix: Solid
Analysis Batch: 610504

Client Sample ID: 250212015-06
Prep Type: TCLP
Prep Batch: 609076

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	1.0		10.0	11.3		mg/L		103	75 - 125
Arsenic	ND		5.00	4.92		mg/L		98	75 - 125
Barium	0.55		100	96.9		mg/L		96	75 - 125
Cadmium	ND		1.00	0.987		mg/L		98	75 - 125
Chromium	ND		5.00	4.97		mg/L		99	75 - 125
Copper	0.51	B	5.00	5.83		mg/L		102	75 - 125
Silver	ND		5.00	5.06		mg/L		101	75 - 125
Molybdenum	0.0098		10.0	10.1		mg/L		101	81 - 125
Nickel	0.10		5.00	5.09		mg/L		100	75 - 125
Lead	0.014	B	5.00	5.04		mg/L		101	75 - 125
Antimony	ND		5.00	4.94		mg/L		99	75 - 125
Selenium	ND		1.00	0.871		mg/L		86	75 - 125
Zinc	2.1		5.00	7.22		mg/L		103	75 - 125

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-609079/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609442 — **Prep Batch: 609079**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		02/23/25 23:30	02/24/25 11:34	1

Lab Sample ID: LCS 410-609079/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609442 — **Prep Batch: 609079**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00100	0.00109		mg/L		109	80 - 118

Lab Sample ID: 180-186617-1 MS — **Client Sample ID: 250212015-06**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 609442 — **Prep Batch: 609079**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.0200	0.0197		mg/L		98	80 - 120

Lab Sample ID: 180-186660-A-1-J DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 609442 — **Prep Batch: 609079**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND	FL	ND		mg/L		NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-609075/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609302 — **Prep Batch: 609075**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		02/23/25 23:40	02/24/25 08:56	1

Lab Sample ID: LCS 410-609075/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609302 — **Prep Batch: 609075**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.173		mg/Kg		104	80 - 120

Lab Sample ID: 410-207502-A-1-K MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609302 — **Prep Batch: 609075**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.177	0.208		mg/Kg	☼	105	80 - 120

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 410-207502-A-1-L MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609302 — **Prep Batch: 609075**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.177	0.199		mg/Kg	☼	100	80 - 120	4	20

Lab Sample ID: 410-207502-A-1-J DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609302 — **Prep Batch: 609075**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

Method: 350.1_GD - Ammonia by Gas Diffusion

Lab Sample ID: LB 180-490403/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 490625

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			02/19/25 17:00	1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-609287/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609931 — **Prep Batch: 609287**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		90		mg/Kg		02/24/25 10:11	02/25/25 12:57	1

Lab Sample ID: LCS 410-609287/25-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609931 — **Prep Batch: 609287**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	ND	*+	mg/Kg		10	0 - 5.14

Lab Sample ID: 410-207804-B-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609931 — **Prep Batch: 609287**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	ND	*+	1000	ND		mg/Kg		0	0 - 44

Lab Sample ID: 410-207804-B-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609931 — **Prep Batch: 609287**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Reactive	ND	*+	1000	ND		mg/Kg		0	0 - 44	NC	11

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-609287/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609433 — **Prep Batch: 609287**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160		mg/Kg		02/24/25 10:11	02/24/25 13:00	1

Lab Sample ID: LCS 410-609287/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609433 — **Prep Batch: 609287**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	539	503		mg/Kg		93	62 - 104

Lab Sample ID: 410-207804-B-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609433 — **Prep Batch: 609287**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	ND	FL F2	539	ND	FL	mg/Kg		20	62 - 104

Lab Sample ID: 410-207804-B-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 609433 — **Prep Batch: 609287**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide, Reactive	ND	FL F2	539	ND	FL F2	mg/Kg		13	62 - 104	43	21

Method: EPA 1020B - Ignitability, Small Scale Closed-Cup Method

Lab Sample ID: 180-186460-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490691

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ignitability	>140		>140		Degrees F		NC	20

Method: EPA 1664B - HEM and SGT-HEM

Lab Sample ID: MB 180-490628/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490663 — **Prep Batch: 490628**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		02/20/25 07:13	02/20/25 11:27	1

Lab Sample ID: LCS 180-490628/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490663 — **Prep Batch: 490628**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.0	34.9		mg/L		87	78 - 114

Method: EPA 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: 180-186533-B-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490663 — **Prep Batch: 490628**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	ND		39.6	33.1		mg/L		84	78 - 114

Lab Sample ID: 180-186533-D-1-A MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490663 — **Prep Batch: 490628**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	ND		39.6	33.6		mg/L		85	78 - 114	1	18

Lab Sample ID: LB 180-490403/1-D — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 490663 — **Prep Batch: 490628**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		4.7		mg/L		02/20/25 07:13	02/20/25 11:27	1

Method: EPA 410.4 - COD

Lab Sample ID: MB 180-490589/12-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490653 — **Prep Batch: 490589**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		02/19/25 12:02	02/19/25 16:17	1

Lab Sample ID: MB 180-490589/36-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490653 — **Prep Batch: 490589**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		02/19/25 12:02	02/19/25 16:34	1

Lab Sample ID: LCS 180-490589/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490653 — **Prep Batch: 490589**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	75.0	72.2		mg/L		96	90 - 110

Lab Sample ID: LCS 180-490589/35-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490653 — **Prep Batch: 490589**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	75.0	70.2		mg/L		94	90 - 110

Method: EPA 410.4 - COD (Continued)

Lab Sample ID: 180-186571-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490653 — **Prep Batch: 490589**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	11		25.0	38.0		mg/L		107	90 - 110

Lab Sample ID: 180-186571-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490653 — **Prep Batch: 490589**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chemical Oxygen Demand	11		25.0	36.7		mg/L		101	90 - 110	4	20

Lab Sample ID: LB 180-490403/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 490653 — **Prep Batch: 490589**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		02/19/25 12:02	02/19/25 16:38	1

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-490364/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490373 — **Prep Batch: 490364**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50		mg/Kg		02/15/25 08:54	02/15/25 11:27	1

Lab Sample ID: HLCS 180-490364/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490373 — **Prep Batch: 490364**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.252		mg/Kg		101	90 - 110

Lab Sample ID: LCS 180-490364/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490373 — **Prep Batch: 490364**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	26.0	27.3		mg/Kg		105	17 - 163

Lab Sample ID: LLCS 180-490364/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490373 — **Prep Batch: 490364**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0526		mg/Kg		105	90 - 110

Method: EPA 9014 - Cyanide (Continued)

Lab Sample ID: 180-186582-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490373 — **Prep Batch: 490364**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	13	FL	14.9	22.9	FL	mg/Kg	☼	66	75 - 125

Lab Sample ID: 180-186582-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490373 — **Prep Batch: 490364**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	13	FL	14.6	21.6	FL	mg/Kg	☼	59	75 - 125	6	20

Lab Sample ID: MB 180-490490/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490517 — **Prep Batch: 490490**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		02/18/25 10:45	02/18/25 15:54	1

Lab Sample ID: HLCS 180-490490/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490517 — **Prep Batch: 490490**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	250	250		ug/L		100	90 - 110

Lab Sample ID: LCS 180-490490/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490517 — **Prep Batch: 490490**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	201		ug/L		100	85 - 115

Lab Sample ID: LLCS 180-490490/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490517 — **Prep Batch: 490490**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	50.0	51.6		ug/L		103	90 - 110

Lab Sample ID: 180-186640-D-5-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490517 — **Prep Batch: 490490**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	18		200	246		ug/L		114	75 - 125

Lab Sample ID: 180-186640-D-5-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490517 — **Prep Batch: 490490**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	18		200	239		ug/L		110	75 - 125	3	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: EPA 9014 - Cyanide

Lab Sample ID: 180-186640-D-5-B DU
Matrix: Solid
Analysis Batch: 490517

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 490490

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	18		17.8		ug/L		0	20

Lab Sample ID: LB 180-490403/1-B
Matrix: Solid
Analysis Batch: 490517

Client Sample ID: Method Blank
Prep Type: ASTM Leach
Prep Batch: 490490

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		02/18/25 10:45	02/18/25 16:11	1

Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 180-490422/2-A
Matrix: Solid
Analysis Batch: 490440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 490422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		30		mg/Kg		02/17/25 11:22	02/17/25 13:08	1

Lab Sample ID: LCS 180-490422/1-A
Matrix: Solid
Analysis Batch: 490440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 490422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	156	151		mg/Kg		97	85 - 115

Lab Sample ID: 180-186617-1 MS
Matrix: Solid
Analysis Batch: 490440

Client Sample ID: 250212015-06
Prep Type: Total/NA
Prep Batch: 490422

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	ND		469	425		mg/Kg	☼	77	75 - 125

Lab Sample ID: 180-186617-1 MSD
Matrix: Solid
Analysis Batch: 490440

Client Sample ID: 250212015-06
Prep Type: Total/NA
Prep Batch: 490422

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND		470	430		mg/Kg	☼	78	75 - 125	1	20

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-490512/1
Matrix: Solid
Analysis Batch: 490512

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

Method: EPA 9040C - pH (Continued)

Lab Sample ID: LB 180-490403/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 490512

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.9		0.1		SU			02/18/25 13:24	1
Temperature	25.0		0.1		Degrees C			02/18/25 13:24	1

Lab Sample ID: 180-186617-1 DU — **Client Sample ID: 250212015-06**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 490512

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	12.0		12.0		SU		0.08	2
Temperature	25.0	I	25.0		Degrees C		0	5

Method: EPA 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 180-490451/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490534 — **Prep Batch: 490451**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.19		mg/Kg		02/18/25 06:18	02/19/25 06:12	1

Lab Sample ID: LCS 180-490451/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490534 — **Prep Batch: 490451**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	4.00	3.91		mg/Kg		98	90 - 110

Lab Sample ID: 180-186459-A-2-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490534 — **Prep Batch: 490451**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	ND		5.51	5.36		mg/Kg	☼	97	90 - 110

Lab Sample ID: 180-186459-A-2-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490534 — **Prep Batch: 490451**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenolics, Total Recoverable	ND		5.73	5.91		mg/Kg	☼	103	90 - 110	10	20

Method: EPA 9095B - Paint Filter

Lab Sample ID: 180-186618-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 490504

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Free Liquid	CNF		CNF		NONE		NC	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Method: SM 2540B - Total Solids

Lab Sample ID: MB 180-490595/1
Matrix: Solid
Analysis Batch: 490595

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			02/19/25 14:27	1

Lab Sample ID: LCS 180-490595/2
Matrix: Solid
Analysis Batch: 490595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Solids	269	228		mg/L		85	85 - 115

Lab Sample ID: LCSD 180-490595/3
Matrix: Solid
Analysis Batch: 490595

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Solids	269	252		mg/L		94	85 - 115	10	20

Lab Sample ID: LB 180-490403/1-A
Matrix: Solid
Analysis Batch: 490595

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			02/19/25 14:27	1

Method: SM 2540E - Solids, Volatile and Fixed (VS)

Lab Sample ID: MB 180-490743/1
Matrix: Solid
Analysis Batch: 490743

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			02/19/25 14:27	1

Lab Sample ID: LB 180-490403/1-A
Matrix: Solid
Analysis Batch: 490743

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			02/19/25 14:27	1

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-186617-1 DU
Matrix: Solid
Analysis Batch: 490443

Client Sample ID: 250212015-06
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	33		31.6		%		5	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

GC/MS VOA

Prep Batch: 600834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-185659-F-3-B MS	Matrix Spike	Total/NA	Solid	5035	
180-185659-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 608271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-4 - RA	250212015-09	Total/NA	Solid	5030C	
180-186617-4	250212015-09	Total/NA	Solid	5030C	

Leach Batch: 608985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	1311	
180-186460-G-1-A MS	Matrix Spike	TCLP	Solid	1311	

Analysis Batch: 610029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	8260D	608985
MB 410-610029/6	Method Blank	Total/NA	Solid	8260D	
LCS 410-610029/4	Lab Control Sample	Total/NA	Solid	8260D	
180-186460-G-1-A MS	Matrix Spike	TCLP	Solid	8260D	608985

Analysis Batch: 610252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-4	250212015-09	Total/NA	Solid	8260D	608271
180-186617-4 - RA	250212015-09	Total/NA	Solid	8260D	608271
MB 410-610252/11	Method Blank	Total/NA	Solid	8260D	
LCS 410-610252/6	Lab Control Sample	Total/NA	Solid	8260D	
LCS 410-610252/8	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-610252/7	Lab Control Sample Dup	Total/NA	Solid	8260D	
LCSD 410-610252/9	Lab Control Sample Dup	Total/NA	Solid	8260D	
180-185659-F-3-B MS	Matrix Spike	Total/NA	Solid	8260D	600834
180-185659-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8260D	600834

GC/MS Semi VOA

Leach Batch: 490418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	EPA 1311	
LB2 180-490418/1-B	Method Blank	TCLP	Solid	EPA 1311	

Prep Batch: 490551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	3510C	490418
LB2 180-490418/1-B	Method Blank	TCLP	Solid	3510C	490418
MB 180-490551/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-490551/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-490551/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 490590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	EPA 8270E	490551
LB2 180-490418/1-B	Method Blank	TCLP	Solid	EPA 8270E	490551

GC/MS Semi VOA (Continued)

Analysis Batch: 490590 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-490551/1-A	Method Blank	Total/NA	Solid	EPA 8270E	490551
LCS 180-490551/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	490551
LCSD 180-490551/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	490551

Prep Batch: 490598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	3541	
MB 180-490598/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-490598/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-186617-1 MS	250212015-06	Total/NA	Solid	3541	
180-186617-1 MSD	250212015-06	Total/NA	Solid	3541	

Analysis Batch: 490645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	EPA 8270E	490598
MB 180-490598/1-A	Method Blank	Total/NA	Solid	EPA 8270E	490598
LCS 180-490598/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	490598
180-186617-1 MS	250212015-06	Total/NA	Solid	EPA 8270E	490598
180-186617-1 MSD	250212015-06	Total/NA	Solid	EPA 8270E	490598

GC Semi VOA

Prep Batch: 490393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-2	250212015-07	Total/NA	Solid	3541	
MB 180-490393/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-490393/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-186503-A-141-A MS	Matrix Spike	Total/NA	Solid	3541	
180-186503-A-141-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Leach Batch: 490418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	EPA 1311	
LB2 180-490418/1-C	Method Blank	TCLP	Solid	EPA 1311	
LB2 180-490418/1-D	Method Blank	TCLP	Solid	EPA 1311	

Prep Batch: 490453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	3541	
MB 180-490453/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-490453/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-186639-A-1-A MS	Matrix Spike	Total/NA	Solid	3541	
180-186639-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 490461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-2	250212015-07	Total/NA	Solid	EPA 8082A	490393
MB 180-490393/1-A	Method Blank	Total/NA	Solid	EPA 8082A	490393
LCS 180-490393/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	490393
180-186503-A-141-A MS	Matrix Spike	Total/NA	Solid	EPA 8082A	490393
180-186503-A-141-B MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	490393

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

GC Semi VOA

Prep Batch: 490525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	8151A	
MB 180-490525/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-490525/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-490525/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	
240-218800-L-2-A MSD	Matrix Spike Duplicate	Total/NA	Solid	8151A	
240-218800-M-2-B MS	Matrix Spike	Total/NA	Solid	8151A	

Prep Batch: 490554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	3510C	490418
LB2 180-490418/1-C	Method Blank	TCLP	Solid	3510C	490418
MB 180-490554/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-490554/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-490554/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Prep Batch: 490614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	8151A	490418
LB2 180-490418/1-D	Method Blank	TCLP	Solid	8151A	490418
MB 180-490614/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-490614/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-490614/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Analysis Batch: 490615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	EPA 8151A	490525
MB 180-490525/1-A	Method Blank	Total/NA	Solid	EPA 8151A	490525
LCS 180-490525/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	490525
LCSD 180-490525/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	490525
240-218800-L-2-A MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8151A	490525
240-218800-M-2-B MS	Matrix Spike	Total/NA	Solid	EPA 8151A	490525

Analysis Batch: 490643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	EPA 8081B	490554
LB2 180-490418/1-C	Method Blank	TCLP	Solid	EPA 8081B	490554
MB 180-490554/1-A	Method Blank	Total/NA	Solid	EPA 8081B	490554
LCS 180-490554/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	490554
LCSD 180-490554/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	490554

Analysis Batch: 490719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	EPA 8151A	490614
LB2 180-490418/1-D	Method Blank	TCLP	Solid	EPA 8151A	490614
MB 180-490614/1-A	Method Blank	Total/NA	Solid	EPA 8151A	490614
LCS 180-490614/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	490614
LCSD 180-490614/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	490614

Analysis Batch: 490727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	EPA 8081B	490453

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

GC Semi VOA (Continued)

Analysis Batch: 490727 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-490453/1-A	Method Blank	Total/NA	Solid	EPA 8081B	490453
LCS 180-490453/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	490453
180-186639-A-1-A MS	Matrix Spike	Total/NA	Solid	EPA 8081B	490453
180-186639-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8081B	490453

HPLC/IC

Leach Batch: 490403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	D3987-85	
LB 180-490403/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 490480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	EPA 9056A	490403
LB 180-490403/1-A	Method Blank	ASTM Leach	Solid	EPA 9056A	490403
MB 180-490480/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-490480/7	Lab Control Sample	Total/NA	Solid	EPA 9056A	
180-186626-E-1 MS	Matrix Spike	Total/NA	Solid	EPA 9056A	
180-186626-E-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9056A	

Specialty Organics

Prep Batch: 610438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-2	250212015-07	Total/NA	Solid	HRMS-Soxtherm	
MB 410-610438/1-A	Method Blank	Total/NA	Solid	HRMS-Soxtherm	
LCS 410-610438/2-A	Lab Control Sample	Total/NA	Solid	HRMS-Soxtherm	
LCSD 410-610438/3-A	Lab Control Sample Dup	Total/NA	Solid	HRMS-Soxtherm	

Analysis Batch: 610901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-610438/2-A	Lab Control Sample	Total/NA	Solid	8290A	610438
LCSD 410-610438/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	610436

Analysis Batch: 611006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-610438/1-A	Method Blank	Total/NA	Solid	8290A	610438

Analysis Batch: 612183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-2	250212015-07	Total/NA	Solid	8290A	610438

Metals

Leach Batch: 608174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186660-A-1-F DU	Duplicate	TCLP	Solid	EPA 1311	
180-186660-A-1-J DU	Duplicate	TCLP	Solid	EPA 1311	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Metals

Leach Batch: 608401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	1311	
180-186617-1 MS	250212015-06	TCLP	Solid	1311	

Prep Batch: 609071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	3050B	
MB 410-609071/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-609071/2-A	Lab Control Sample	Total/NA	Solid	3050B	
410-206616-D-20-AB MS	Matrix Spike	Total/NA	Solid	3050B	
410-206616-D-20-AC MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-206616-D-20-AA DU	Duplicate	Total/NA	Solid	3050B	

Prep Batch: 609075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	7471B	
MB 410-609075/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-609075/2-A	Lab Control Sample	Total/NA	Solid	7471B	
410-207502-A-1-K MS	Matrix Spike	Total/NA	Solid	7471B	
410-207502-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
410-207502-A-1-J DU	Duplicate	Total/NA	Solid	7471B	

Prep Batch: 609076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	3005A	608401
MB 410-609076/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 410-609076/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
180-186617-1 MS	250212015-06	TCLP	Solid	3005A	608401
180-186660-A-1-F DU	Duplicate	TCLP	Solid	3005A	608174

Prep Batch: 609079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	7470A	608401
MB 410-609079/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 410-609079/2-A	Lab Control Sample	Total/NA	Solid	7470A	
180-186617-1 MS	250212015-06	TCLP	Solid	7470A	608401
180-186660-A-1-J DU	Duplicate	TCLP	Solid	7470A	608174

Analysis Batch: 609302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	7471B	609075
MB 410-609075/1-A	Method Blank	Total/NA	Solid	7471B	609075
LCS 410-609075/2-A	Lab Control Sample	Total/NA	Solid	7471B	609075
410-207502-A-1-K MS	Matrix Spike	Total/NA	Solid	7471B	609075
410-207502-A-1-L MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	609075
410-207502-A-1-J DU	Duplicate	Total/NA	Solid	7471B	609075

Analysis Batch: 609349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	6010D	609076
MB 410-609076/1-A	Method Blank	Total Recoverable	Solid	6010D	609076
LCS 410-609076/2-A	Lab Control Sample	Total Recoverable	Solid	6010D	609078

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

Metals (Continued)

Analysis Batch: 609349 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1 MS	250212015-06	TCLP	Solid	6010D	609076
180-186660-A-1-F DU	Duplicate	TCLP	Solid	6010D	609076

Analysis Batch: 609375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	8010D	609071
MB 410-609071/1-A	Method Blank	Total/NA	Solid	6010D	609071
LCS 410-609071/2-A	Lab Control Sample	Total/NA	Solid	6010D	609071
410-206616-D-20-AB MS	Matrix Spike	Total/NA	Solid	6010D	609071
410-206616-D-20-AC MSD	Matrix Spike Duplicate	Total/NA	Solid	8010D	609071
410-206616-D-20-AA DU	Duplicate	Total/NA	Solid	6010D	609071

Analysis Batch: 609442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	7470A	809079
MB 410-609079/1-A	Method Blank	Total/NA	Solid	7470A	609079
LCS 410-609079/2-A	Lab Control Sample	Total/NA	Solid	7470A	609079
180-188817-1 MS	250212015-06	TCLP	Solid	7470A	609079
180-186660-A-1-J DU	Duplicate	TCLP	Solid	7470A	609079

Analysis Batch: 610504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	TCLP	Solid	6020B	609076
MB 410-609076/1-A	Method Blank	Total Recoverable	Solid	6020B	609076
LCS 410-609076/2-A	Lab Control Sample	Total Recoverable	Solid	6020B	609076
180-186617-1 MS	250212015-08	TCLP	Solid	6020B	609076

General Chemistry

Prep Batch: 490364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188617-1	250212015-08	Total/NA	Solid	9010C	
MB 180-490364/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-490364/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-490364/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-490364/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-186582-A-1-B MS	Matrix Spike	Total/NA	Solid	9010C	
180-186582-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	9010C	

Analysis Batch: 490373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	EPA 9014	490364
MB 180-490384/4-A	Method Blank	Total/NA	Solid	EPA 9014	490364
HLCS 180-490364/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	490364
LCS 180-490364/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	490364
LLCS 180-490364/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	490364
180-186582-A-1-B MS	Matrix Spike	Total/NA	Solid	EPA 9014	490364
180-186582-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9014	490364

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

General Chemistry

Leach Batch: 490403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	D3987-85	
180-186617-3	250212015-08	ASTM Leach	Solid	D3987-85	
LB 180-490403/1-A	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-490403/1-B	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-490403/1-C	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-490403/1-D	Method Blank	ASTM Leach	Solid	D3987-85	
180-186617-1 DU	250212015-06	ASTM Leach	Solid	D3987-85	

Prep Batch: 490422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	9030B	
MB 180-490422/2-A	Method Blank	Total/NA	Solid	9030B	
LCS 180-490422/1-A	Lab Control Sample	Total/NA	Solid	9030B	
180-188617-1 MS	250212015-06	Total/NA	Solid	9030B	
180-186617-1 MSD	250212015-06	Total/NA	Solid	9030B	

Analysis Batch: 490440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	EPA 9034	490422
MB 180-490422/2-A	Method Blank	Total/NA	Solid	EPA 9034	490422
LCS 180-490422/1-A	Lab Control Sample	Total/NA	Solid	EPA 9034	490422
180-186617-1 MS	250212015-06	Total/NA	Solid	EPA 9034	490422
180-186617-1 MSD	250212015-06	Total/NA	Solid	EPA 9034	490422

Analysis Batch: 490443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	SM 2540G	
180-186617-2	250212015-07	Total/NA	Solid	SM 2540G	
180-186617-4	250212015-09	Total/NA	Solid	SM 2540G	
180-186617-1 DU	250212015-06	Total/NA	Solid	SM 2540G	

Prep Batch: 490451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-2	250212015-07	Total/NA	Solid	Distill/Phenol	
MB 180-490451/1-A	Method Blank	Total/NA	Solid	Distill/Phenol	
LCS 180-490451/2-A	Lab Control Sample	Total/NA	Solid	Distill/Phenol	
180-186459-A-2-E MS	Matrix Spike	Total/NA	Solid	Distill/Phenol	
180-186459-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	Distill/Phenol	

Prep Batch: 490490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	9010C	490403
LB 180-490403/1-B	Method Blank	ASTM Leach	Solid	9010C	490403
MB 180-490490/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-490490/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-490490/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-490490/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-186640-D-5-C MS	Matrix Spike	Total/NA	Solid	9010C	
180-186640-D-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	9010C	
180-186640-D-5-B DU	Duplicate	Total/NA	Solid	9010C	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

General Chemistry

Analysis Batch: 490504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	EPA 9095B	
180-186618-A-1 DU	Duplicate	Total/NA	Solid	EPA 9095B	

Analysis Batch: 490512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	EPA 9040C	490403
LB 180-490403/1-A	Method Blank	ASTM Leach	Solid	EPA 9040C	490403
LCS 180-490512/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
180-186617-1 DU	250212015-06	ASTM Leach	Solid	EPA 9040C	490403

Analysis Batch: 490517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	EPA 9014	490490
LB 180-490403/1-B	Method Blank	ASTM Leach	Solid	EPA 9014	490490
MB 180-490490/4-A	Method Blank	Total/NA	Solid	EPA 9014	490490
HLCS 180-490490/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	490490
LCS 180-490490/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	490490
LLCS 180-490490/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	490490
180-186640-D-5-C MS	Matrix Spike	Total/NA	Solid	EPA 9014	490490
180-186640-D-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9014	490490
180-186640-D-5-B DU	Duplicate	Total/NA	Solid	EPA 9014	490490

Analysis Batch: 490534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-2	250212015-07	Total/NA	Solid	EPA 9065	490451
MB 180-490451/1-A	Method Blank	Total/NA	Solid	EPA 9085	490451
LCS 180-490451/2-A	Lab Control Sample	Total/NA	Solid	EPA 9065	490451
180-186459-A-2-E MS	Matrix Spike	Total/NA	Solid	EPA 9065	490451
180-186459-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9065	490451

Prep Batch: 490589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	410.4	490403
LB 180-490403/1-C	Method Blank	ASTM Leach	Solid	410.4	490403
MB 180-490589/12-A	Method Blank	Total/NA	Solid	410.4	
MB 180-490589/36-A	Method Blank	Total/NA	Solid	410.4	
LCS 180-490589/11-A	Lab Control Sample	Total/NA	Solid	410.4	
LCS 180-490589/35-A	Lab Control Sample	Total/NA	Solid	410.4	
180-186571-B-1-B MS	Matrix Spike	Total/NA	Solid	410.4	
180-186571-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	410.4	

Analysis Batch: 490595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	SM 2540B	490403
LB 180-490403/1-A	Method Blank	ASTM Leach	Solid	SM 2540B	490403
MB 180-490595/1	Method Blank	Total/NA	Solid	SM 2540B	
LCS 180-490595/2	Lab Control Sample	Total/NA	Solid	SM 2540B	
LCSD 180-490595/3	Lab Control Sample Dup	Total/NA	Solid	SM 2540B	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

General Chemistry

Analysis Batch: 490625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	350.1_GD	490403
LB 180-490403/1-A	Method Blank	ASTM Leach	Solid	350.1_GD	490403

Prep Batch: 490628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-3	250212015-08	ASTM Leach	Solid	1664B	490403
LB 180-490403/1-D	Method Blank	ASTM Leach	Solid	1664B	490403
MB 180-490628/1-A	Method Blank	Total/NA	Solid	1664B	
LCS 180-490628/2-A	Lab Control Sample	Total/NA	Solid	1664B	
180-188533-B-1-A MS	Matrix Spike	Total/NA	Solid	1664B	
180-186533-D-1-A MSD	Matrix Spike Duplicate	Total/NA	Solid	1664B	

Analysis Batch: 490653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	EPA 410.4	490589
LB 180-490403/1-C	Method Blank	ASTM Leach	Solid	EPA 410.4	490589
MB 180-490589/12-A	Method Blank	Total/NA	Solid	EPA 410.4	490589
MB 180-490589/36-A	Method Blank	Total/NA	Solid	EPA 410.4	490589
LCS 180-490589/11-A	Lab Control Sample	Total/NA	Solid	EPA 410.4	490589
LCS 180-490589/35-A	Lab Control Sample	Total/NA	Solid	EPA 410.4	490589
180-186571-B-1-B MS	Matrix Spike	Total/NA	Solid	EPA 410.4	490589
180-186571-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 410.4	490589

Analysis Batch: 490663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-188617-3	250212015-08	ASTM Leach	Solid	EPA 1664B	490628
LB 180-490403/1-D	Method Blank	ASTM Leach	Solid	EPA 1664B	490828
MB 180-490628/1-A	Method Blank	Total/NA	Solid	EPA 1664B	490628
LCS 180-490628/2-A	Lab Control Sample	Total/NA	Solid	EPA 1664B	490628
180-186533-B-1-A MS	Matrix Spike	Total/NA	Solid	EPA 1664B	490628
180-186533-D-1-A MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 1864B	490628

Analysis Batch: 490691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	EPA 1020B	
180-186460-A-1 DU	Duplicate	Total/NA	Solid	EPA 1020B	

Analysis Batch: 490743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	ASTM Leach	Solid	SM 2540E	490403
LB 180-490403/1-A	Method Blank	ASTM Leach	Solid	SM 2540E	490403
MB 180-490743/1	Method Blank	Total/NA	Solid	SM 2540E	

Prep Batch: 609287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	7.3.4	
MB 410-609287/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-609287/25-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-809287/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
410-207804-B-1-A MS	Matrix Spike	Total/NA	Solid	7.3.4	
410-207804-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.4	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-186617-1
SDG: 250212015

General Chemistry (Continued)

Prep Batch: 609287 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-207804-B-1-D MS	Matrix Spike	Total/NA	Solid	7.3.4	
410-207804-B-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.4	

Analysis Batch: 609433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	9034	609287
MB 410-609287/1-A	Method Blank	Total/NA	Solid	9034	609287
LCS 410-609287/2-A	Lab Control Sample	Total/NA	Solid	9034	609287
410-207804-B-1-A MS	Matrix Spike	Total/NA	Solid	9034	609287
410-207804-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	9034	609287

Analysis Batch: 609931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-186617-1	250212015-06	Total/NA	Solid	9012	609287
MB 410-609287/1-A	Method Blank	Total/NA	Solid	9012	609287
LCS 410-609287/25-A	Lab Control Sample	Total/NA	Solid	9012	609287
410-207804-B-1-D MS	Matrix Spike	Total/NA	Solid	9012	609287
410-207804-B-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	9012	609287

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250212015**

Additional Information : Quarterly Limed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	See attached Parameter List (Tests to be Performed)	See attached Parameter List	HEM, ASTM HEM, %total solids	VOA EPA 8260D *	Total Solids	
							Number of Containers					
250212015-06	2/12/25	0620	S	N	C	Always maintain sample/extract at	9					
250212015-07	2/12/25	0620	S	N	G	25°C when reading any pH result.		1				
250212015-08	2/12/25	0620	S	N	G	Solids must be analyzed by 2540G.			1			
250212015-09	2/12/25	0620	S	N*	G	All methods must be accredited by				1	1	
						PADEP or NELAC.						
						Email a copy of LIMS login with signed						
						COC as soon as possible after receipt.						
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-186617 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	2/14/25	0935	[signature]	EUROFINS PGH	2-14-25	0935
[signature]	EPTNE	2-14-25	1340	D Watson	EPTNE	2-14-25	1340

COC Analyst Cooler Review: Initials: TO Date: 2/14/25

Supervisor Review: Initials: SZ Date: 2-13-25

Contract Lab portion of Quarterly Analysis when shared with ALCOSAN Lab- with metals

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
		ASH, GRIT, SCUM & LIMED SLUDGE- QUARTERLY	
		COMPOSITE (2 Clear Quarts + 4 Amber half pints + 2 pints)	
7 days of a Grab sample to generate a Composite* (minimum 5 grabs) **Each sample matrix is analyzed for all parameters listed.** ---------- NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlimed sludge is included, analyses are performed by contract laboratory(s) only- **see Residuals for which quarter.**	Quarterly	ASTM EXTRACTION (LIQUID) pH(SW-846 9040C) Nitrate-Nitrogen NH3-N pH Temp(SW-846 9040C) Cyanide, Total Total Sulfates Total Solids COD Total Volatile Solids TCLP EXTRACTION (LIQUID) TCLP METALS· Antimony Herbicides Aluminum Boron Arsenic Copper Pesticides Barium Molybdenum Chloradane Cadmium Nickel Toxaphene Chromium Zinc 8270 BNA Lead Silver 8260 Volatile Organics (ZHE) Mercury Selenium MISCELLANEOUS (SOLID) Herbicides Arsenic Molybdenum Pesticides Barium Nickel Heptachlor/Hep. Epoxide Cadmium Zinc Chlordane Chromium Boron Toxaphene Lead Total Sulfur (SW846 6010) Cyanide, Total (comp not grab) Thallium Copper Total Sulfide (comp not grab) Selenium Sodium Paint Filter Test Silver Solids, Total (SM2540G)* Ignitability Antimony 8270 BNA Beryllium COMPOSITE (Half Pint) Lancaster Lab Reactive Cyanide (wet and dry) Reactive Sulfide (wet and dry) AMBER GRAB (1 Amber quart) PCBs * 2,3,7,8-TCDD* Phenolics * Solids, Total (SM2540G)* HEM GRAB (1 clear pint) Oil & Grease * ASTM Oil & Grease* Solids, Total (SM2540G)* VOA GRAB (1 vial + 1 jar for TS) 8260 Volatile Organics * Solids, Total (SM2540G)* * Analyses done on a separate grab sample for each matrix.	Laboratory

Red indicates analyses performed by a contract laboratory

SEND 2 FULL CLEAR QUARTS + 4 AMBER 1/2 PINTS + 2 PINTS + ONE HALF PINT OF COMPOSITE, 1 CLEAR PINT GRAB FOR HEM, 1 AMBER QUART GRAB FOR EACH LOCATION, AND 1 VOA VIAL GRAB WITH 1 JAR FOR TS)

Alcosan #17 -0.8

J8 2.0

J9 2.1

J10 3.6

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-186617-1
SDG Number: 250212015

Login Number: 186617
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	False	Sample splitting required for subcontract purposes.
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-186617-1
SDG Number: 250212015

Login Number: 186617
List Number: 2
Creator: Burkholder, Conrad

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 02/19/25 09:49 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-08 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
COD	Contract Lab	EurofinsPittsburgh	4/25/2025	1400	mg/L	100		
Cyanide, Total	Contract Lab	EurofinsPittsburgh	5/6/2025	72	ug/L	10		
Ammonia-Nitrogen	Contract Lab	EurofinsPittsburgh	4/24/2025	38	mg/L	5.0		
Nitrate, as Nitrogen	Contract Lab	EurofinsPittsburgh	4/25/2025	<0.10	mg/L	0.10		
pH	Contract Lab	EurofinsPittsburgh	4/24/2025	9.80	s.u.	0.1		
ASTM pH Temperature	Contract Lab	EurofinsPittsburgh	4/24/2025	25.4	°C	0.1	!	Laboratory is not accredited for this parameter. See Eurofins report for details.
Sulfates	Contract Lab	EurofinsPittsburgh	4/25/2025	13	mg/L	1.0		
Total Solids	Contract Lab	EurofinsPittsburgh	5/1/2025	1500	mg/L	20		
Total Volatile Solids	Contract Lab	EurofinsPittsburgh	5/1/2025	1100	mg/L	20	!	Laboratory is not accredited for this parameter. See Eurofins report for details.
Chemistry								
Cyanide, Total	Contract Lab	EurofinsPittsburgh	4/23/2025	4.8	mg/kg dry	1.5		
Contract Lab								
Ignitability	Contract Lab	EurofinsPittsburgh	4/23/2025	>140	°F			
Chlordane	Contract Lab	EurofinsPittsburgh	4/23/2025	<500	ug/Kg Dry	500		

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Wednesday, May 28, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-08 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Paint Filter Test	Contract Lab	EurofinsPittsburgh	4/29/2025	CNF		0.10		Contains No Free Liquid
Reactive Cyanide	Contract Lab	EurofinsLancaster	5/2/2025	<87	mg/kg	87		
Reactive Sulfide	Contract Lab	EurofinsLancaster	5/1/2025	<150	mg/kg	150		
Thallium	Contract Lab	EurofinsLancaster	5/7/2025	<0.26	mg/Dry Kg	0.26		
Total Sulfide	Contract Lab	EurofinsPittsburgh	4/23/2025	210	mg/kg dry	88		
Total Sulfur	Contract Lab	EurofinsLancaster	5/7/2025	5600	mg/kg dry	130		
Toxaphene	Contract Lab	EurofinsPittsburgh	4/23/2025	<2000	ug/Kg Dry	2000		
Herbicides	Contract Lab	EurofinsPittsburgh	4/25/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	4/23/2025	34	%	0.50		
Daily 2								
pH	SW846 9045D	gverbene	4/22/2025	12.34	s.u.			
pH Temperature	SW846 9045D	gverbene	4/22/2025	20.6				
Extractable Organics								
8270 BNA	Contract Lab	EurofinsPittsburgh	4/25/2025	See attached Report	ug/Kg Dry			
Pesticides	Contract Lab	EurofinsPittsburgh	4/23/2025	See attached report	ug/Kg Dry			
Metals								

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Wednesday, May 28, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-08 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Antimony	Contract Lab	EurofinsLancaster	5/7/2025	1.6	mg/kg dry	0.52		
Arsenic	Contract Lab	EurofinsLancaster	5/7/2025	6.9	mg/kg dry	1.0		
Barium	Contract Lab	EurofinsLancaster	5/7/2025	250	mg/Dry Kg	1.0		
Beryllium	Contract Lab	EurofinsLancaster	5/7/2025	0.67	mg/kg dry	0.26		
Boron	Contract Lab	EurofinsLancaster	5/7/2025	<52	mg/kg dry	52		
Cadmium	Contract Lab	EurofinsLancaster	5/7/2025	0.85	mg/Dry Kg	0.26		
Chromium	Contract Lab	EurofinsLancaster	5/7/2025	33	mg/Dry Kg	1.0		
Copper	Contract Lab	EurofinsLancaster	5/7/2025	170	ug/Kg Dry	1.0		
Lead	Contract Lab	EurofinsLancaster	5/7/2025	38	mg/Dry Kg	0.52		
Mercury, Total	EPA 7471B	jweaver	5/2/2025	0.29	mg/Dry Kg	0.16		
Molybdenum	Contract Lab	EurofinsLancaster	5/7/2025	6.5	mg/Dry Kg	0.52		
Nickel	Contract Lab	EurofinsLancaster	5/7/2025	23	mg/Dry Kg	1.0		
Selenium	Contract Lab	EurofinsLancaster	5/7/2025	3.4	mg/Dry Kg	1.0		
Silver	Contract Lab	EurofinsLancaster	5/7/2025	1.4	mg/Dry Kg	0.26		
Sodium	Contract Lab	EurofinsLancaster	5/7/2025	490	mg/Dry Kg	130		
Zinc	Contract Lab	EurofinsLancaster	5/7/2025	420	mg/Dry Kg	79		

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Wednesday, May 28, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-08 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
TCLP								
Chlordane	Contract Lab	EurofinsPittsburgh	4/25/2025	<0.0050	mg/L	0.0050		
Aluminum	Contract Lab	EurofinsLancaster	4/29/2025	0.44	mg/L	0.25		
Antimony	Contract Lab	EurofinsLancaster	4/29/2025	<0.010	mg/L	0.010	FL B	MS and/or MSD recovery below control limits Analyte was found in the blank.
Arsenic	Contract Lab	EurofinsLancaster	4/29/2025	<0.020	mg/L	0.020	FL	MS and/or MSD recovery below control limits
Barium	Contract Lab	EurofinsLancaster	4/29/2025	0.27	mg/L	0.020	B	Analyte was found in the blank.
Boron	Contract Lab	EurofinsLancaster	4/29/2025	<0.50	mg/L	0.50	FL	MS and/or MSD recovery below control limits
Cadmium	Contract Lab	EurofinsLancaster	4/29/2025	<0.0050	mg/L	0.0050		
Chromium	Contract Lab	EurofinsLancaster	4/29/2025	<0.020	mg/L	0.020		
Copper	Contract Lab	EurofinsLancaster	4/29/2025	0.052	mg/L	0.010		
Lead	Contract Lab	EurofinsLancaster	4/29/2025	<0.0050	mg/L	0.0050		
Mercury	Contract Lab	EurofinsLancaster	4/29/2025	<0.00020	mg/L	0.00020	*+FL	LCS and/or LCSD is outside acceptance limits, high biased. MS and/or MSD recovery below control limits.
Molybdenum	Contract Lab	EurofinsLancaster	4/29/2025	0.0056	mg/L	0.0050	B	Analyte was found in the blank.

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Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-08 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Nickel	Contract Lab	EurofinsLancaster	4/29/2025	0.11	mg/L	0.010		
Selenium	Contract Lab	EurofinsLancaster	4/29/2025	0.013	mg/L	0.010	FL	MS and/or MSD recovery below control limits
Silver	Contract Lab	EurofinsLancaster	4/29/2025	<0.0050	mg/L	0.0050		
Zinc	Contract Lab	EurofinsLancaster	4/29/2025	1.2	mg/L	0.10		
608 Pesticides	Contract Lab	EurofinsPittsburgh	4/25/2025	See Attached	mg/L			
Chloradane	Contract Lab	EurofinsPittsburgh	4/25/2025	<0.0050	mg/L	0.0050		
Toxaphene	Contract Lab	EurofinsPittsburgh	4/25/2025	<0.040	mg/L	0.040		
TCLP BNA	Contract Lab	EurofinsPittsburgh	4/25/2025	See attached report	mg/L			
Toxaphene	Contract Lab	EurofinsPittsburgh	4/25/2025	<0.040	mg/L	0.040		
TCLP Volatile Organics	Contract Lab	EurofinsLancaster	5/8/2025	See Attached	mg/L			
Herbicides	Contract Lab	EurofinsPittsburgh	4/28/2025	See attached report	mg/L			

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-08 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier	Data Qualifier Description
B	Similar concentration found in field/method blank

Comments:

comp 4/11-4/21

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

"ALCOSAN Laboratory reported SW846 9045D pH results are corrected to 25 deg. C using a temperature correction calculation"

Released by:

Larissa Hoover 5-28-25

Date

Printed Date
Wednesday, May 28, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-08A **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITEA

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Fixed Solids	SM 2540G - 2015	snixon	4/23/2025	42.40	%			
Percent Total Solids	SM 2540G - 2015	snixon	4/23/2025	33.4	%			
Percent Volatile Solids	SM 2540G - 2015	snixon	4/23/2025	57.60	%			

Data Qualifier **Data Qualifier Description**

Comments:

comp 4/11-4/21

Released by:

Larissa Hart

5-28-25

Date

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Wednesday, May 28, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-09 **Sample Type:** GRAB

Customer Sample Number: Amber Grab

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Phenolics, Total	Contract Lab	EurofinsPittsburgh	4/24/2025	3.1	mg/Dry Kg	0.61		
Contract Lab								
2,3,7,8-TCDD	Contract Lab	EurofinsLancaster	4/26/2025	<2.9	pg/g Dry	2.9		
PCBs	Contract Lab	EurofinsPittsburgh	4/23/2025	See attached report				
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	4/23/2025	34	%	0.50		

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Wednesday, May 28, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-09 **Sample Type:** GRAB

Customer Sample Number: Amber Grab

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

comp 4/11-4/21

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hoak

5-28-25

Date

Printed Date
Wednesday, May 28, 2025

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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-10 **Sample Type:** GRAB

Customer Sample Number: HEM Grab

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
Hexane Extractable Material	Contract Lab	EurofinsPittsburgh	4/24/2025	<5.1	mg/L	5.1		
Chemistry								
Hexane Extractable Material	Contract Lab	EurofinsPittsburgh	4/24/2025	10000	mg/Dry Kg	470	FH	MS and/or MSD recovery above control limits.
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	4/23/2025	35	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

comp 4/11-4/21

Contract Lab

EurofinsPittsburgh

Contract Lab Certification Number

PADEP 02-00416

Released by:

5-28-25

Date

Printed Date

Wednesday, May 28, 2025

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ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250422010 **Sample Date:** 4/21/2025

Sample ID Number: 250422010-11 **Sample Type:** GRAB

Customer Sample Number: VOA Grab

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	4/23/2025	34	%	0.50		
Volatile Organics								
Volatile Organics	Contract Lab	EurofinsLancaster	4/28/2025	See attached report	ug/Kg Dry			

Data Qualifier **Data Qualifier Description**

Comments:

comp 4/11-4/21

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

5-28-25

Date

Printed Date
Wednesday, May 28, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 5/12/2025 3:41:00 PM

JOB DESCRIPTION

Quarterly Limed Sludge
250422010

JOB NUMBER

180-189451-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

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PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

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Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 7
Certification Summary 9
Sample Summary 10
Method Summary 11
Lab Chronicle 13
Client Sample Results 18
QC Sample Results 29
QC Association Summary 70
Chain of Custody 80
Receipt Checklists 85

Job Narrative
180-189451-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 4/22/2025 3:05 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.0°C and 3.3°C.

Comments
The following is the pH to an additional decimal place for 9040C/ASTM: 9.80
The following test was analyzed on a water following ASTM Leach of the sludge. The lab is certified for this method in Non-Potable Water - SM2540E

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 410-637860 recovered above the upper control limit for Acetone and Methyl Ethyl Ketone. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D: The continuing calibration verification (CCV) analyzed on 410-637860 is compliant under 8260C/D method criteria for 4-Bromofluorobenzene (Surr). The software does not display the % Drift data to the whole number as is listed in the method (i.e. limit of 20%). When applying the evaluation to a whole number, the check passes the criteria with a value of 20% Drift.

Method 8260D - TCLP: The continuing calibration verification (CCV) analyzed on 410-641204 is compliant under 8260C/D method criteria for Naphthalene . The software does not display the % Drift data to the whole number as is listed in the method (i.e. limit of 20%). When applying the evaluation to a whole number, the check passes the criteria with a value of 20% Drift.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) analyzed in 180-494649 was outside the method criteria for the following analyte: Di-n-octyl phthalate. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The following sample was diluted due to the nature of the sample matrix: 250422010-08 (180-189451-1). Elevated reporting limits (RLs) are provided.

Method 8270E - TCLP: The continuing calibration verification (CCV) analyzed in 180-494649 was outside the method criteria for the following analyte: Di-n-octyl phthalate. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
Method 8151A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 180-494442.

Job ID: 180-189451-1 (Continued)

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Method 8151A - TCLP: The continuing calibration verification (CCV) associated with 180-494747 recovered high and outside the control limits for 2,4-D and Silvex on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCVRT 180-494747/1).

Method 8151A - TCLP: The continuing calibration verification (CCV) associated with batch 180-494747 recovered above the upper control limit for Silvex. The samples associated with this CCV were non-detects for the affected analytes; therefore, the deta heve been reported. The associated sample is:(CCV 180-494747/8).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-494434 and analytical batch 180-494455 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8081B: The continuing calibration verification (CCV) associated with batch 180-494455 recovered above the upper control limit for Aldrin, Endosulfan I, and Heptachlor. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:250422010-08 (180-189451-1).

Method 8081B: The following samples were diluted due to the nature of the sample matrix: 250422010-08 (180-189451-1), (180-189451-B-1-A MS) and (180-189451-B-1-B MSD). Elevated reporting limits (RLs) are provided.

Method 8081B: The continuing calibration verification (CCV) associated with 180-494455 recovered outside the control limits for Tetrachloro-m-xylene on one column. Results are confirmed on both columns and reported from the passing column. The associated samples are: (CCVIS 180-494455/32) and (CCVIS 180-494455/6).

Method 8081B: The Tetrachloro-m-xylene surrogate recovery for the following samples was outside acceptance limits (high biased) on the primary confirmation column due to matrix interference: 250422010-08 (180-189451-1). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control.

Method 8081B - TCLP: The continuing calibration verification (CCV) associated with batch 180-494661 recovered above the upper control limit for multiple analytes of interest. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:250422010-08 (180-189451-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 9056A_ORGFM_48H - ASTM Leach: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-494667 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Dioxin
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B - TCLP: The TCLP leachate blank for batch 410-635087 contained Barium, Molybdenum and Antimony above the reporting limit (RL). This target analyte concentration was less than the TCLP Regulatory Limit. The associated samples were also below the TCLP Regulatory Limit for this analyte; therefore, re-extraction was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 1664B - ASTM Leach: The reference method requires samples to be preserved to a pH of <2. The following sample was insufficient preservation at a pH of >2 after ASTM filtration: 250422010-10 (180-189451-3). The sample was preserved to the

Job ID: 180-189451-1 (Continued)

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appropriate pH before 1664B_SPE extraction.

Method 1664B - ASTM Leach: The matrix spike (MS) recoveries for preparation batch 180-494540 and analytical batch 180-494591 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 350.1 - ASTM Leach: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250422010-08 (180-189451-1). Elevated reporting limits (RLs) are provided.

Method 410.4 - ASTM Leach: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250422010-08 (180-189451-1). Elevated reporting limits (RLs) are provided.

Method 9071B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 180-494433 and analytical batch 180-494593 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) precision was within acceptance limits.

Method 9071B: The matrix spike duplicate (MSD) recoveries for preparation batch 180-494433 and analytical betch 180-494593 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^c	CCV Recovery is outside acceptance limits.
S1-	Surrogate recovery exceeds control limits, low biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Analyte was found in the blank.
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.

General Chemistry

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	05-06-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 9040C		Solid	Temperature
SM 2540E		Solid	Total Volatile Solids

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-189451-1	250422010-08	Solid	04/21/25 10:45	04/22/25 15:05
180-189451-2	250422010-09	Solid	04/21/25 10:45	04/22/25 15:05
180-189451-3	250422010-10	Solid	04/21/25 10:45	04/22/25 15:05
180-189451-4	250422010-11	Solid	04/21/25 10:45	04/22/25 15:05

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	ELLE
6010D	Metals (ICP)	SW848	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
350.1_GD	Ammonia by Gas Diffusion	EPA	EET PIT
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Reactive	SW848	ELLE
EPA 1020B	Ignitability, Small Scale Closed-Cup Method	SW846	EET PIT
EPA 1664B	HEM and SGT-HEM	EPA	EET PIT
EPA 410.4	COD	MCAWW	EET PIT
EPA 9014	Cyanide	SW846	EET PIT
EPA 9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET PIT
EPA 9040C	pH	SW846	EET PIT
EPA 9065	Phenolics, Total Recoverable	SW846	EET PIT
EPA 9071B	HEM and SGT-HEM	SW846	EET PIT
EPA 9095B	Paint Filter	SW846	EET PIT
SM 2540B	Total Solids	SM	EET PIT
SM 2540E	Solids, Volatile and Fixed (VS)	SM	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
1311	TCLP Extraction	SW846	ELLE
1664B	HEM and SGT-HEM (SPE)	1664B	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3050B	Preparation, Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
410.4	COD	EPA	EET PIT
5030C	Purge and Trap	SW846	ELLE
7.3.3	Cyanide, Reactive	SW848	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7470A	Preparation, Mercury	SW848	ELLE
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET PIT
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET PIT
9071B	Preparation, HEM and SGT-HEM	SW846	EET PIT
D3987-85	ASTM Leaching Procedure	ASTM	EET PIT
Distill/Phenol	Distillation, Phenolics	None	EET PIT
EPA 1311	TCLP Extraction	SW846	EET PIT
HRMS-Soxtherm	Soxtherm Extraction	EPA	ELLE

Protocol References:

1664B = EPA-821-98-002
ASTM = ASTM International
EPA = US Environmental Protection Agency
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

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Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Method	Method Description	Protocol	Laboratory

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-08
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25.0 g	140 mL	636978	04/29/25 11:57	ZL4A	ELLE
TCLP	Analysis	8260D		20	5 mL	5 mL	841204	05/08/25 17:10	DVW2	ELLE
	Instrument ID: 26285									
TCLP	Leach	EPA 1311			100.15 g	2000 mL	494447	04/23/25 07:37	MTM	EET PIT
TCLP	Prep	3510C			200 mL	10.0 mL	494632	04/24/25 22:36	DPD	EET PIT
TCLP	Analysis	EPA 8270E		1	1 mL	1 mL	494649	04/25/25 14:38	VVP	EET PIT
	Instrument ID: CH722									
TCLP	Leach	EPA 1311			100.15 g	2000 mL	494447	04/23/25 07:37	MTM	EET PIT
TCLP	Prep	3510C			100 mL	40.0 mL	494631	04/24/25 21:54	DPD	EET PIT
TCLP	Analysis	EPA 8081B		1			494661	04/25/25 13:58	CMR	EET PIT
	Instrument ID: CHGC15									
TCLP	Leach	EPA 1311			100.15 g	2000 mL	494447	04/23/25 07:37	MTM	EET PIT
TCLP	Prep	8151A			100 mL	10.0 mL	494633	04/24/25 23:47	DPD	EET PIT
TCLP	Analysis	EPA 8151A		20	1 mL	1 mL	494747	04/28/25 11:14	SJM	EET PIT
	Instrument ID: CGC1									
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	494448	04/23/25 07:38	MTM	EET PIT
ASTM Leach	Analysis	EPA 9056A		1	1 mL	1 mL	494667	04/25/25 20:36	M1D	EET PIT
	Instrument ID: INTEGRION									
TCLP	Leach	1311			100.11 g	2000 mL	635087	04/24/25 14:26	U9GW	ELLE
TCLP	Prep	3005A			5 mL	50 mL	635886	04/28/25 06:37	UJL8	ELLE
TCLP	Analysis	6010D		1			636732	04/28/25 17:07	T8CQ	ELLE
	Instrument ID: T74 - 23745									
TCLP	Leach	1311			100.11 g	2000 mL	635087	04/24/25 14:26	U9GW	ELLE
TCLP	Prep	3005A			5 mL	50 mL	635886	04/28/25 06:37	UJL8	ELLE
TCLP	Analysis	6020B		1			638569	05/01/25 22:25	LHF4	ELLE
	Instrument ID: E08 - 30647									
TCLP	Leach	1311			100.11 g	2000 mL	635087	04/24/25 14:26	U9GW	ELLE
TCLP	Prep	3005A			5 mL	50 mL	635886	04/28/25 06:37	UJL8	ELLE
TCLP	Analysis	8020B		1			637960	04/30/25 22:51	LHF4	ELLE
	Instrument ID: E09 - 30921									
TCLP	Leach	1311			100.11 g	2000 mL	635087	04/24/25 14:26	U9GW	ELLE
TCLP	Prep	7470A			20 mL	20 mL	635887	04/28/25 07:24	UJL8	ELLE
TCLP	Analysis	7470A		1			637392	04/29/25 22:39	IJ3I	ELLE
	Instrument ID: M10 – 31820									
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	494448	04/23/25 07:38	MTM	EET PIT
ASTM Leach	Analysis	350.1_GD		50			494615	04/24/25 13:06	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									
Total/NA	Prep	7.3.4			10.35 g	500 mL	638138	05/01/25 08:58	B6LN	ELLE
Total/NA	Analysis	9012		1			638758	05/02/25 00:31	P684	ELLE
	Instrument ID: S0027									
Total/NA	Prep	7.3.4			10.35 g	500 mL	638138	05/01/25 08:58	B6LN	ELLE
Total/NA	Analysis	9034		1	200 mL	200 mL	638254	05/01/25 11:46	B6LN	ELLE
	Instrument ID: NOEQUIP									
Total/NA	Analysis	EPA 1020B		1			494518	04/23/25 16:26	BAB	EET PIT
	Instrument ID: LUCI									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-08

Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	494448	04/23/25 07:38	MTM	EET PIT
ASTM Leach	Prep	410.4			1 mL	10 mL	494694	04/25/25 11:52	ELS	EET PIT
ASTM Leach	Analysis	EPA 410.4		1	1 mL	10 mL	494780	04/25/25 16:29	ELS	EET PIT
	Instrument ID:	GENESYS10S								
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	494448	04/23/25 07:38	MTM	EET PIT
ASTM Leach	Prep	9010C			10 mL	10 mL	495279	05/08/25 14:09	RAO	EET PIT
ASTM Leach	Analysis	EPA 9014		1			495290	05/06/25 16:21	RAO	EET PIT
	Instrument ID:	JAWS								
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	494448	04/23/25 07:38	MTM	EET PIT
ASTM Leach	Analysis	EPA 9040C		1			494610	04/24/25 15:31	BAB	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	EPA 9095B		1			494900	04/29/25 14:15	A1K	EET PIT
	Instrument ID:	NOEQUIP								
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	494448	04/23/25 07:38	MTM	EET PIT
ASTM Leach	Analysis	SM 2540B		1	50 mL	100 mL	494932	05/01/25 12:50	SNR	EET PIT
	Instrument ID:	NOEQUIP								
ASTM Leach	Leach	D3987-85			100.03 g	2000 mL	494448	04/23/25 07:38	MTM	EET PIT
ASTM Leach	Analysis	SM 2540E		1	50 mL	100 mL	495022	05/01/25 12:50	SNR	EET PIT
	Instrument ID:	NOEQUIP								
Total/NA	Analysis	SM 2540G		1			494513	04/23/25 14:15	LWM	EET PIT
	Instrument ID:	NOEQUIP								

Client Sample ID: 250422010-08

Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1

Matrix: Solid
Percent Solids: 33.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			30.1 g	5.0 mL	494607	04/24/25 17:30	DVC	EET PIT
Total/NA	Analysis	EPA 8270E		4	1 mL	1 mL	494649	04/25/25 19:09	VVP	EET PIT
	Instrument ID:	CH722								
Total/NA	Prep	3541			15.3 g	20.0 mL	494434	04/23/25 05:53	MKK	EET PIT
Total/NA	Analysis	EPA 8081B		10			494455	04/23/25 20:55	CMR	EET PIT
	Instrument ID:	CHGC15								
Total/NA	Prep	8151A			10.0 g	40.0 mL	494442	04/23/25 07:18	KAV	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	494846	04/25/25 09:50	SJM	EET PIT
	Instrument ID:	CGC1								
Total/NA	Prep	3050B			1.14 g	100 mL	640416	05/06/25 22:00	UAMX	ELLE
Total/NA	Analysis	6010D		1			640716	05/07/25 07:58	MT26	ELLE
	Instrument ID:	T75 - 27278								
Total/NA	Prep	3050B			1.14 g	100 mL	640416	05/06/25 22:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			840825	05/07/25 12:04	F7JF	ELLE
	Instrument ID:	E10								
Total/NA	Prep	9010C			0.20 g	10 mL	494486	04/23/25 11:29	RAO	EET PIT
Total/NA	Analysis	EPA 9014		1			494507	04/23/25 13:43	RAO	EET PIT
	Instrument ID:	SHAMU								

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-08

Lab Sample ID: 180-189451-1
Date Collected: 04/21/25 10:45
Matrix: Solid
Date Received: 04/22/25 15:05
Percent Solids: 33.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			5.07 g	50 mL	494451	04/23/25 08:13	EBA	EET PIT
Total/NA	Analysis	EPA 9034		1			494464	04/23/25 10:21	EBA	EET PIT
	Instrument ID: TITRAT1									

Client Sample ID: 250422010-09

Lab Sample ID: 180-189451-2
Date Collected: 04/21/25 10:45
Matrix: Solid
Date Received: 04/22/25 15:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			494513	04/23/25 14:15	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250422010-09

Lab Sample ID: 180-189451-2
Date Collected: 04/21/25 10:45
Matrix: Solid
Date Received: 04/22/25 15:05
Percent Solids: 33.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.1 g	20.0 mL	494438	04/23/25 06:05	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	494463	04/23/25 17:04	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	HRMS-Soxtherm			10.08 g	20 uL	635340	04/24/25 21:58	SA8Q	ELLE
Total/NA	Analysis	8290A		1	20 uL	0 mL	635833	04/26/25 07:00	TJK2	ELLE
	Instrument ID: DF18471									
Total/NA	Prep	Distill/Phenol			0.49 g	10.0 mL	494549	04/24/25 07:53	RSK	EET PIT
Total/NA	Analysis	EPA 9065		1			494611	04/24/25 12:23	RSK	EET PIT
	Instrument ID: SHAMU									

Client Sample ID: 250422010-10

Lab Sample ID: 180-189451-3
Date Collected: 04/21/25 10:45
Matrix: Solid
Date Received: 04/22/25 15:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			66.08 g	1321.6 mL	494448	04/23/25 07:38	MTM	EET PIT
ASTM Leach	Prep	1884B			990 mL	1000 mL	494540	04/24/25 07:17	A1K	EET PIT
ASTM Leach	Analysis	EPA 1664B		1			494591	04/24/25 11:03	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540G		1			494513	04/23/25 14:15	LWM	EET PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-10

Lab Sample ID: 180-189451-3
Date Collected: 04/21/25 10:45
Matrix: Solid
Date Received: 04/22/25 15:05
Percent Solids: 35.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9071B			30.2 g	30.0 g	494433	04/23/25 05:48	MKK	EET PIT
Total/NA	Analysis	EPA 9071B		1			494593	04/24/25 11:14	A1K	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250422010-11

Lab Sample ID: 180-189451-4
Date Collected: 04/21/25 10:45
Matrix: Solid
Date Received: 04/22/25 15:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			494513	04/23/25 14:15	LWM	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250422010-11

Lab Sample ID: 180-189451-4
Date Collected: 04/21/25 10:45
Matrix: Solid
Date Received: 04/22/25 15:05
Percent Solids: 34.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C	DL		4.92 g	10 mL	635738	04/25/25 22:21	PV7W	ELLE
Total/NA	Analysis	8260D	DL	50	5 mL	5 mL	837880	05/01/25 00:17	S8BP	ELLE
	Instrument ID: 7566									
Total/NA	Prep	5030C	RADL		4.92 g	10 mL	635738	04/25/25 22:21	PV7W	ELLE
Total/NA	Analysis	8260D	RADL	50	5 mL	5 mL	639726	05/05/25 21:31	S8BP	ELLE
	Instrument ID: 7566									
Total/NA	Prep	5030C			1.15 g	5 mL	635897	04/25/25 23:27	UK3O	ELLE
Total/NA	Analysis	8260D		1	5 g	5 mL	636474	04/28/25 17:30	F2QS	ELLE
	Instrument ID: 9953									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancester Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT

Batch Type: Leach

MTM = Matthew McGhee

Batch Type: Prep

A1K = Agnes Komlos
DPD = Declan Donley
DVC = Daniel Capodanno
EBA = Elizabeth Arbster
ELS = Edwin Shireman
KAV = Katelyn Voss
MKK = Mary Kenny
RAO = Rachel Oster
RSK = Robert Kurtz

Batch Type: Analysis

A1K = Agnes Komlos
BAB = Brooke Batyi
CMR = Carl Reagle
EBA = Elizabeth Arbster
ELS = Edwin Shireman
JMO = John Oravec
LWM = Leslie McIntire
M1D = Maureen Donlin
RAO = Rachel Oster
RSK = Robert Kurtz
SJM = Shannon Mueller
SNR = Sabra Richart
VVP = Vincent Piccolino

Lab: ELLE

Batch Type: Leach

U9GW = Ivonne Mejia
ZL4A = Isac Moua

Batch Type: Prep

B6LN = Aslin Muniz
PV7W = Trinity Breneman
SA8Q = Erik Greavison
UAMX = Annamaria Kuhns
UJL8 = James Mertz
UK3O = Rebecca Williams

Batch Type: Analysis

B6LN = Aslin Muniz
DVW2 = Kayla Kephart
F2QS = Hannah Levy
F7JF = Dennis Dick
IJ3I = Elizabeth Brittingham
LHF4 = Diamond Boyer
MT26 = Jason Knight
P684 = Ashlynn Cornelius
S8BP = Kirsten Loeb
T8CQ = Sera Bargo
TJK2 = Brandon Jensen

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-08
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1
Matrix: Solid
Percent Solids: 33.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.020		mg/L			05/08/25 17:10	20
1,2-Dichloroethane	ND		0.020		mg/L			05/08/25 17:10	20
2-Butanone (MEK)	**0.24**		0.20		mg/L			05/08/25 17:10	20
Benzene	ND		0.020		mg/L			05/08/25 17:10	20
Carbon tetrachloride	ND		0.020		mg/L			05/08/25 17:10	20
Chlorobenzene	ND		0.020		mg/L			05/08/25 17:10	20
Chloroform	ND		0.020		mg/L			05/08/25 17:10	20
Naphthalene	ND	^c	0.10		mg/L			05/08/25 17:10	20
Tetrachloroethene	ND		0.020		mg/L			05/08/25 17:10	20
Trichloroethene	ND		0.020		mg/L			05/08/25 17:10	20
Vinyl chloride	ND		0.020		mg/L			05/08/25 17:10	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*05/08/25 17:10*	*20*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*		*05/08/25 17:10*	*20*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*05/08/25 17:10*	*20*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/08/25 17:10*	*20*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Acenaphthylene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Acetophenone	ND		4000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Anthracene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Atrazine	ND		4000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Benzaldehyde	ND		4000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Benzo[a]anthracene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Benzo[b]fluoranthene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Benzo[k]fluoranthene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Benzo[g,h,i]perylene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Benzo[a]pyrene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
1,1'-Biphenyl	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Bis(2-chloroethoxy)methane	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Bis(2-chloroethyl)ether	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2,2'-oxybis[1-chloropropane]	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Bis(2-ethylhexyl) phthalate	ND		20000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
4-Bromophenyl phenyl ether	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Butyl benzyl phthalate	ND		9900		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Caprolactam	ND		10000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Carbazole	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
4-Chloroaniline	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
4-Chloro-3-methylphenol	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2-Chloronaphthalene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2-Chlorophenol	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
4-Chlorophenyl phenyl ether	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Chrysene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Dibenz(a,h)anthracene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Dibenzofuran	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Di-n-butyl phthalate	ND		20000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
3,3'-Dichlorobenzidine	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4

Client Sample ID: 250422010-08
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1
Matrix: Solid
Percent Solids: 33.5

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Diethyl phthalate	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2,4-Dimethylphenol	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Dimethyl phthalate	ND		4000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
4,6-Dinitro-2-methylphenol	ND		10000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2,4-Dinitrophenol	ND		20000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2,4-Dinitrotoluene	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2,6-Dinitrotoluene	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Di-n-octyl phthalate	ND	^c	2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Fluoranthene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Fluorene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Hexachlorobenzene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Hexachlorobutadiene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Hexachlorocyclopentadiene	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Hexachloroethane	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Indeno[1,2,3-cd]pyrene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Isophorone	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2-Methylnaphthalene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2-Methylphenol	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Methylphenol, 3 & 4	**6100**		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Naphthalene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2-Nitroaniline	ND		10000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
3-Nitroaniline	ND		10000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
4-Nitroaniline	ND		10000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Nitrobenzene	ND		4000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2-Nitrophenol	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
4-Nitrophenol	ND		10000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
N-Nitrosodiphenylamine	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
N-Nitrosodi-n-propylamine	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Pentachlorophenol	ND		10000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Phenanthrene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Phenol	**2100**		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
Pyrene	ND		400		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2,4,5-Trichlorophenol	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4
2,4,6-Trichlorophenol	ND		2000		ug/Kg	☼	04/24/25 17:30	04/25/25 19:09	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*44 - 105*	*04/24/25 17:30*	*04/25/25 19:09*	*4*
2-Fluorophenol	*64*		*48 - 105*	*04/24/25 17:30*	*04/25/25 19:09*	*4*
2,4,6-Tribromophenol	*65*		*34 - 108*	*04/24/25 17:30*	*04/25/25 19:09*	*4*
Nitrobenzene-d5	*64*		*46 - 105*	*04/24/25 17:30*	*04/25/25 19:09*	*4*
Phenol-d5	*66*		*46 - 105*	*04/24/25 17:30*	*04/25/25 19:09*	*4*
Terphenyl-d14	*61*		*39 - 105*	*04/24/25 17:30*	*04/25/25 19:09*	*4*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1
2,4-Dinitrotoluene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1
Hexachlorobenzene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1
Hexachlorobutadiene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1

Client Sample ID: 250422010-08
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1
Matrix: Solid
Percent Solids: 33.5

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1
2-Methylphenol	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1
Methylphenol, 3 & 4	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1
Nitrobenzene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1
Pentachlorophenol	ND		0.25		mg/L		04/24/25 22:36	04/25/25 14:38	1
Pyridine	ND		0.10		mg/L		04/24/25 22:36	04/25/25 14:38	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		04/24/25 22:36	04/25/25 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*10 - 130*	*04/24/25 22:36*	*04/25/25 14:38*	*1*
2-Fluorophenol	*61*		*10 - 130*	*04/24/25 22:36*	*04/25/25 14:38*	*1*
2,4,6-Tribromophenol	*61*		*10 - 130*	*04/24/25 22:36*	*04/25/25 14:38*	*1*
Nitrobenzene-d5	*54*		*10 - 130*	*04/24/25 22:36*	*04/25/25 14:38*	*1*
Phenol-d5	*59*		*10 - 130*	*04/24/25 22:36*	*04/25/25 14:38*	*1*
Terphenyl-d14	*54*		*10 - 130*	*04/24/25 22:36*	*04/25/25 14:38*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	^c	50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
alpha-BHC	ND	FH	50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
beta-BHC	ND	FH	50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
delta-BHC	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
gamma-BHC (Lindane)	ND	FH	50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
cis-Chlordane	ND	FH	50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
trans-Chlordane	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
4,4'-DDD	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Chlordane (technical)	ND		500		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
4,4'-DDE	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
4,4'-DDT	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Dieldrin	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Endosulfan I	ND	^c	50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Endosulfan II	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Endosulfan sulfate	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Endrin	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Endrin aldehyde	ND	FL	50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Endrin ketone	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Heptachlor	ND	FH ^c	50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Heptachlor epoxide	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Methoxychlor	ND		50		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10
Toxaphene	ND		2000		ug/Kg	☼	04/23/25 05:53	04/23/25 20:55	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*135*	*S1+ ^c*	*53 - 124*	*04/23/25 05:53*	*04/23/25 20:55*	*10*
Tetrachloro-m-xylene	*83*	*p*	*53 - 124*	*04/23/25 05:53*	*04/23/25 20:55*	*10*
DCB Decachlorobiphenyl (Surr)	*100*		*36 - 142*	*04/23/25 05:53*	*04/23/25 20:55*	*10*
DCB Decachlorobiphenyl (Surr)	*127*		*36 - 142*	*04/23/25 05:53*	*04/23/25 20:55*	*10*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-08
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1
Matrix: Solid
Percent Solids: 33.5

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050		mg/L		04/24/25 21:54	04/25/25 13:58	1
Endrin	ND	^c	0.00050		mg/L		04/24/25 21:54	04/25/25 13:58	1
gamma-BHC (Lindane)	ND		0.00050		mg/L		04/24/25 21:54	04/25/25 13:58	1
Heptachlor	ND	^c	0.00050		mg/L		04/24/25 21:54	04/25/25 13:58	1
Heptachlor epoxide	ND	^c	0.00050		mg/L		04/24/25 21:54	04/25/25 13:58	1
Methoxychlor	ND		0.00050		mg/L		04/24/25 21:54	04/25/25 13:58	1
Toxaphene	ND		0.040		mg/L		04/24/25 21:54	04/25/25 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 120*	*04/24/25 21:54*	*04/25/25 13:58*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 120*	*04/24/25 21:54*	*04/25/25 13:58*	*1*
Tetrachloro-m-xylene	*76*		*15 - 141*	*04/24/25 21:54*	*04/25/25 13:58*	*1*
Tetrachloro-m-xylene	*89*		*15 - 141*	*04/24/25 21:54*	*04/25/25 13:58*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		240		ug/Kg	☼	04/23/25 07:18	04/25/25 09:50	1
2,4,5-T	ND		60		ug/Kg	☼	04/23/25 07:18	04/25/25 09:50	1
Silvex (2,4,5-TP)	ND		60		ug/Kg	☼	04/23/25 07:18	04/25/25 09:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*80*		*13 - 111*	*04/23/25 07:18*	*04/25/25 09:50*	*1*
2,4-Dichlorophenylacetic acid	*78*		*13 - 111*	*04/23/25 07:18*	*04/25/25 09:50*	*1*

Method: SW846 EPA 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND	^c	0.040		mg/L		04/24/25 23:47	04/28/25 11:14	20
Silvex (2,4,5-TP)	ND	^c	0.010		mg/L		04/24/25 23:47	04/28/25 11:14	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*61*		*13 - 111*	*04/24/25 23:47*	*04/28/25 11:14*	*20*
2,4-Dichlorophenylacetic acid	*57*	*^c*	*13 - 111*	*04/24/25 23:47*	*04/28/25 11:14*	*20*

Method: SW846 EPA 9056A - Anions, Ion Chromatography - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**13**		1.0		mg/L			04/25/25 20:36	1
Nitrate as N	ND		0.10		mg/L			04/25/25 20:36	1

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		52		mg/Kg	☼	05/06/25 22:00	05/07/25 07:58	1
Sulfur	**5600**		130		mg/Kg	☼	05/06/25 22:00	05/07/25 07:58	1

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND	FL	0.50		mg/L		04/28/25 06:37	04/28/25 17:07	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.6**		0.52		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Arsenic	**6.9**		1.0		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Barium	**250**		1.0		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-08
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1
Matrix: Solid
Percent Solids: 33.5

Method: SW846 6020B - Metals (ICP/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	**0.67**		0.26		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Cadmium	**0.85**		0.26		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Chromium	**33**		1.0		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Copper	**170**		1.0		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Lead	**38**		0.52		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Molybdenum	**6.5**		0.52		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Nickel	**23**		1.0		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Selenium	**3.4**		1.0		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Silver	**1.4**		0.26		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Sodium	**490**		130		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Thallium	ND		0.26		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2
Zinc	**420**		79		mg/Kg	☼	05/06/25 22:00	05/07/25 12:04	2

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.44**		0.25		mg/L		04/28/25 06:37	04/30/25 22:51	1
Arsenic	ND	FL	0.020		mg/L		04/28/25 06:37	04/30/25 22:51	1
Barium	**0.27**	**B**	0.020		mg/L		04/28/25 06:37	04/30/25 22:51	1
Cadmium	ND		0.0050		mg/L		04/28/25 06:37	05/01/25 22:25	1
Chromium	ND		0.020		mg/L		04/28/25 06:37	04/30/25 22:51	1
Copper	**0.052**		0.010		mg/L		04/28/25 06:37	04/30/25 22:51	1
Silver	ND		0.0050		mg/L		04/28/25 06:37	04/30/25 22:51	1
Molybdenum	**0.0056**	**B**	0.0050		mg/L		04/28/26 06:37	04/30/25 22:51	1
Nickel	**0.11**		0.010		mg/L		04/28/25 06:37	04/30/25 22:51	1
Lead	ND		0.0050		mg/L		04/28/25 06:37	04/30/25 22:51	1
Antimony	ND	FL B	0.010		mg/L		04/28/25 06:37	04/30/25 22:51	1
Selenium	**0.013**	**FL**	0.010		mg/L		04/28/25 06:37	04/30/25 22:51	1
Zinc	**1.2**		0.10		mg/L		04/28/25 06:37	04/30/25 22:51	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	*+ FL	0.00020		mg/L		04/28/25 07:24	04/29/25 22:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive (SW846 9012)	ND		87		mg/Kg		05/01/25 08:58	05/02/25 00:31	1
Sulfide, Reactive (SW846 9034)	ND		150		mg/Kg		05/01/25 08:58	05/01/25 11:46	1
Ignitability (SW846 EPA 1020B)	**>140**				Degrees F			04/23/25 16:26	1
Cyanide, Total (SW846 EPA 9014)	**4.8**		1.5		mg/Kg	☼	04/23/25 11:29	04/23/25 13:43	1
Sulfide (SW846 EPA 9034)	**210**		88		mg/Kg	☼	04/23/25 08:13	04/23/25 10:21	1
Free Liquid (SW846 EPA 9095B)	**CNF**		0.10		NONE			04/29/25 14:15	1
Total Solids (SM 2540G)	**34**		0.50		%			04/23/25 14:15	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled (EPA 350.1_GD)	**38**		5.0		mg/L			04/24/25 13:06	50
Chemical Oxygen Demand (MCAWW EPA 410.4)	**1400**		100		mg/L		04/25/25 11:52	04/25/25 16:29	1
Cyanide, Total (SW846 EPA 9014)	**72**		10		ug/L		05/06/25 14:09	05/06/25 16:21	1
pH (SW846 EPA 9040C)	**9.8**		0.1		SU			04/24/25 15:31	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-08
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-1
Matrix: Solid
Percent Solids: 33.5

General Chemistry - ASTM Leach (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Temperature (SW846 EPA 9040C)	25.4	I	0.1		Degrees C			04/24/25 15:31	1
Total Solids (SM 2540B)	1500		20		mg/L			05/01/25 12:50	1
Total Volatile Solids (SM 2540E)	1100	I	20		mg/L			05/01/25 12:50	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-09
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-2
Matrix: Solid
Percent Solids: 33.6

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49		ug/Kg	☼	04/23/25 06:05	04/23/25 17:04	1
PCB-1221	ND		49		ug/Kg	☼	04/23/25 06:05	04/23/25 17:04	1
PCB-1232	ND		49		ug/Kg	☼	04/23/25 06:05	04/23/25 17:04	1
PCB-1242	ND		49		ug/Kg	☼	04/23/25 06:05	04/23/25 17:04	1
PCB-1248	ND		49		ug/Kg	☼	04/23/25 06:05	04/23/25 17:04	1
PCB-1254	ND		49		ug/Kg	☼	04/23/25 06:05	04/23/25 17:04	1
PCB-1260	ND		49		ug/Kg	☼	04/23/25 06:05	04/23/25 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*74*		*17 - 144*	*04/23/25 06:05*	*04/23/25 17:04*	*1*
Tetrachloro-m-xylene (Surr)	*59*		*17 - 144*	*04/23/25 06:05*	*04/23/25 17:04*	*1*
DCB Decachlorobiphenyl (Surr)	*65*		*26 - 142*	*04/23/25 06:05*	*04/23/25 17:04*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*26 - 142*	*04/23/25 06:05*	*04/23/25 17:04*	*1*

Method: SW846 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		2.9		pg/g	☼	04/24/25 21:58	04/26/25 07:00	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*57*		*40 - 135*	*04/24/25 21:58*	*04/26/25 07:00*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (SW846 EPA 9065)	**3.1**		0.61		mg/Kg	☼	04/24/25 07:53	04/24/25 12:23	1
Total Solids (SM 2540G)	**34**		0.50		%			04/23/25 14:15	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-10
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-3
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**35**		0.50		%			04/23/25 14:15	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (EPA 1664B)	ND		5.1		mg/L		04/24/25 07:17	04/24/25 11:03	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-10
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-3
Matrix: Solid
Percent Solids: 35.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (SW846 EPA 9071B)	10000	FH	470		mg/Kg	☼	04/23/25 05:48	04/24/25 11:14	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-11
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-4
Matrix: Solid
Percent Solids: 34.5

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
1,1,2,2-Tetrachloroethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
1,1,2-Trichloroethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
1,1-Dichloroethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
1,1-Dichloroethene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
1,2-Dichlorobenzene	ND		83		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
1,2-Dichloroethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
1,2-Dichloropropane	ND		83		ug/Kg	☼	04/26/25 23:27	04/28/25 17:30	1
1,3-Dichlorobenzene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
1,4-Dichlorobenzene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
2-Chloroethyl vinyl ether	ND		130		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
2-Hexanone	ND		130		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Benzene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Bromodichloromethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Bromoform	ND		130		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Bromomethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Carbon disulfide	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Carbon tetrachloride	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Chlorobenzene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Chloroethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Chloroform	**78**		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Chloromethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
cis-1,3-Dichloropropene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Dibromochloromethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Ethylbenzene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
methyl isobutyl ketone	ND		130		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Methylene Chloride	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
m-Xylene & p-Xylene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
o-Xylene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Styrene	**86**		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Tetrachloroethene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Toluene	**150**		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
trans-1,2-Dichloroethene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
trans-1,3-Dichloropropene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Trichloroethene	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Trichlorofluoromethane	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Vinyl acetate	ND		130		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Vinyl chloride	ND		63		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1
Xylenes, Total	ND		130		ug/Kg	☼	04/25/25 23:27	04/28/25 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*54 - 135*	*04/25/25 23:27*	*04/28/25 17:30*	*1*
4-Bromofluorobenzene (Surr)	*85*		*50 - 131*	*04/25/25 23:27*	*04/28/25 17:30*	*1*
Dibromofluoromethane (Surr)	*53*		*50 - 141*	*04/25/25 23:27*	*04/28/25 17:30*	*1*
Toluene-d8 (Surr)	*107*		*52 - 141*	*04/25/25 23:27*	*04/28/25 17:30*	*1*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**39000**	**^c**	7600		ug/Kg	☼	04/25/25 22:21	05/01/25 00:17	50
Methyl Ethyl Ketone	**14000**	**^c**	3900		ug/Kg	☼	04/25/25 22:21	05/01/25 00:17	50

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Client Sample ID: 250422010-11
Date Collected: 04/21/25 10:45
Date Received: 04/22/25 15:05

Lab Sample ID: 180-189451-4
Matrix: Solid
Percent Solids: 34.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		54 - 135	04/25/25 22:21	05/01/25 00:17	50
4-Bromofluorobenzene (Surr)	96	^c	50 - 131	04/25/25 22:21	05/01/25 00:17	50
Dibromofluoromethane (Surr)	9	S1-	50 - 141	04/25/25 22:21	05/01/25 00:17	50
Toluene-d8 (Surr)	99		52 - 141	04/25/25 22:21	05/01/25 00:17	50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	40000	^c	7800		ug/Kg	☼	04/25/25 22:21	05/05/25 21:31	50
Methyl Ethyl Ketone	11000	^c	3900		ug/Kg	☼	04/25/25 22:21	05/05/25 21:31	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		54 - 135	04/25/25 22:21	05/05/25 21:31	50
4-Bromofluorobenzene (Surr)	93		50 - 131	04/25/25 22:21	05/05/25 21:31	50
Dibromofluoromethane (Surr)	0.8	S1-	50 - 141	04/25/25 22:21	05/05/25 21:31	50
Toluene-d8 (Surr)	95		52 - 141	04/25/25 22:21	05/05/25 21:31	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	34		0.50		%			04/23/25 14:15	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-636474/9
Matrix: Solid
Analysis Batch: 636474

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/Kg			04/28/25 14:58	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			04/28/25 14:58	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			04/28/25 14:58	1
1,1-Dichloroethane	ND		5.0		ug/Kg			04/28/25 14:58	1
1,1-Dichloroethene	ND		5.0		ug/Kg			04/28/25 14:58	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			04/28/25 14:58	1
1,2-Dichloroethane	ND		5.0		ug/Kg			04/28/25 14:58	1
1,2-Dichloropropane	ND		5.0		ug/Kg			04/28/25 14:58	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			04/28/25 14:58	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			04/28/25 14:58	1
2-Chloroethyl vinyl ether	ND		10		ug/Kg			04/28/25 14:58	1
2-Hexanone	ND		10		ug/Kg			04/28/25 14:58	1
Acetone	ND		20		ug/Kg			04/28/25 14:58	1
Benzene	ND		5.0		ug/Kg			04/28/25 14:58	1
Bromodichloromethane	ND		5.0		ug/Kg			04/28/25 14:58	1
Bromoform	ND		10		ug/Kg			04/28/25 14:58	1
Bromomethane	ND		5.0		ug/Kg			04/28/25 14:58	1
Carbon disulfide	ND		5.0		ug/Kg			04/28/25 14:58	1
Carbon tetrachloride	ND		5.0		ug/Kg			04/28/25 14:58	1
Chlorobenzene	ND		5.0		ug/Kg			04/28/25 14:58	1
Chloroethane	ND		5.0		ug/Kg			04/28/25 14:58	1
Chloroform	ND		5.0		ug/Kg			04/28/25 14:58	1
Chloromethane	ND		5.0		ug/Kg			04/28/25 14:58	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			04/28/25 14:58	1
Dibromochloromethane	ND		5.0		ug/Kg			04/28/25 14:58	1
Ethylbenzene	ND		5.0		ug/Kg			04/28/25 14:58	1
Methyl Ethyl Ketone	ND		10		ug/Kg			04/28/25 14:58	1
methyl isobutyl ketone	ND		10		ug/Kg			04/28/25 14:58	1
Methylene Chloride	ND		5.0		ug/Kg			04/28/25 14:58	1
m-Xylene & p-Xylene	ND		5.0		ug/Kg			04/28/25 14:58	1
o-Xylene	ND		5.0		ug/Kg			04/28/25 14:58	1
Styrene	ND		5.0		ug/Kg			04/28/25 14:58	1
Tetrachloroethene	ND		5.0		ug/Kg			04/28/25 14:58	1
Toluene	ND		5.0		ug/Kg			04/28/25 14:58	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			04/28/25 14:58	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			04/28/25 14:58	1
Trichloroethene	ND		5.0		ug/Kg			04/28/25 14:58	1
Trichlorofluoromethane	ND		5.0		ug/Kg			04/28/25 14:58	1
Vinyl acetate	ND		10		ug/Kg			04/28/25 14:58	1
Vinyl chloride	ND		5.0		ug/Kg			04/28/25 14:58	1
Xylenes, Total	ND		10		ug/Kg			04/28/25 14:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*54 - 135*		*04/28/25 14:58*	*1*
4-Bromofluorobenzene (Surr)	*91*		*50 - 131*		*04/28/25 14:58*	*1*
Dibromofluoromethane (Surr)	*95*		*50 - 141*		*04/28/25 14:58*	*1*
Toluene-d8 (Surr)	*96*		*52 - 141*		*04/28/25 14:58*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-636474/5
Matrix: Solid
Analysis Batch: 636474

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	19.6		ug/Kg		98	69 - 123
1,1,2,2-Tetrachloroethane	20.0	20.6		ug/Kg		103	69 - 125
1,1,2-Trichloroethane	20.0	20.3		ug/Kg		102	76 - 120
1,1-Dichloroethane	20.0	21.4		ug/Kg		107	68 - 120
1,1-Dichloroethene	20.0	22.8		ug/Kg		114	73 - 129
1,2-Dichlorobenzene	20.0	19.9		ug/Kg		100	74 - 120
1,2-Dichloroethane	20.0	18.1		ug/Kg		91	72 - 124
1,2-Dichloropropane	20.0	20.9		ug/Kg		105	70 - 124
1,3-Dichlorobenzene	20.0	20.2		ug/Kg		101	75 - 120
1,4-Dichlorobenzene	20.0	20.3		ug/Kg		102	76 - 122
2-Chloroethyl vinyl ether	20.0	20.9		ug/Kg		104	68 - 120
2-Hexanone	250	263		ug/Kg		105	54 - 140
Acetone	250	235		ug/Kg		94	28 - 169
Benzene	20.0	20.2		ug/Kg		101	80 - 120
Bromodichloromethane	20.0	19.4		ug/Kg		97	70 - 120
Bromoform	20.0	18.8		ug/Kg		94	66 - 127
Bromomethane	20.0	20.5		ug/Kg		103	60 - 120
Carbon disulfide	20.0	17.4		ug/Kg		87	64 - 133
Carbon tetrachloride	20.0	19.6		ug/Kg		99	64 - 120
Chlorobenzene	20.0	20.2		ug/Kg		101	74 - 120
Chloroethane	20.0	20.9		ug/Kg		104	55 - 127
Chloroform	20.0	18.8		ug/Kg		94	73 - 120
Chloromethane	20.0	19.6		ug/Kg		98	43 - 120
cis-1,3-Dichloropropene	20.0	19.5		ug/Kg		98	66 - 120
Dibromochloromethane	20.0	19.2		ug/Kg		96	69 - 125
Ethylbenzene	20.0	19.6		ug/Kg		98	72 - 118
Methyl Ethyl Ketone	250	226		ug/Kg		90	48 - 142
methyl isobutyl ketone	250	263		ug/Kg		105	67 - 138
Methylene Chloride	20.0	20.9		ug/Kg		105	76 - 122
m-Xylene & p-Xylene	40.0	39.8		ug/Kg		100	80 - 120
o-Xylene	20.0	19.8		ug/Kg		99	75 - 120
Styrene	20.0	19.8		ug/Kg		99	76 - 120
Tetrachloroethene	20.0	19.8		ug/Kg		99	73 - 120
Toluene	20.0	20.0		ug/Kg		100	71 - 120
trans-1,2-Dichloroethene	20.0	21.0		ug/Kg		105	71 - 126
trans-1,3-Dichloropropene	20.0	19.2		ug/Kg		96	68 - 122
Trichloroethene	20.0	20.7		ug/Kg		104	72 - 120
Trichlorofluoromethane	20.0	20.1		ug/Kg		101	49 - 120
Vinyl chloride	20.0	20.3		ug/Kg		102	52 - 120
Xylenes, Total	60.0	59.6		ug/Kg		99	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*54 - 135*
4-Bromofluorobenzene (Surr)	*97*		*50 - 131*
Dibromofluoromethane (Surr)	*94*		*50 - 141*
Toluene-d8 (Surr)	*98*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-636474/7
Matrix: Solid
Analysis Batch: 636474

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	100	85.0		ug/Kg		85	68 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*54 - 135*
4-Bromofluorobenzene (Surr)	*93*		*50 - 131*
Dibromofluoromethane (Surr)	*95*		*50 - 141*
Toluene-d8 (Surr)	*95*		*52 - 141*

Lab Sample ID: LCSD 410-636474/6
Matrix: Solid
Analysis Batch: 636474

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	19.9		ug/Kg		99	69 - 123	1	30
1,1,2,2-Tetrachloroethane	20.0	21.4		ug/Kg		107	69 - 125	4	30
1,1,2-Trichloroethane	20.0	20.7		ug/Kg		103	76 - 120	2	30
1,1-Dichloroethane	20.0	21.1		ug/Kg		106	68 - 120	2	30
1,1-Dichloroethene	20.0	22.6		ug/Kg		113	73 - 129	1	30
1,2-Dichlorobenzene	20.0	20.1		ug/Kg		100	74 - 120	1	30
1,2-Dichloroethane	20.0	18.6		ug/Kg		93	72 - 124	2	30
1,2-Dichloropropane	20.0	21.1		ug/Kg		106	70 - 124	1	30
1,3-Dichlorobenzene	20.0	20.3		ug/Kg		102	75 - 120	1	30
1,4-Dichlorobenzene	20.0	20.4		ug/Kg		102	76 - 122	0	30
2-Chloroethyl vinyl ether	20.0	21.3		ug/Kg		106	68 - 120	2	30
2-Hexanone	250	276		ug/Kg		110	54 - 140	5	30
Acetone	250	224		ug/Kg		90	28 - 169	5	30
Benzene	20.0	20.3		ug/Kg		101	80 - 120	0	30
Bromodichloromethane	20.0	19.4		ug/Kg		97	70 - 120	0	30
Bromoform	20.0	19.7		ug/Kg		98	66 - 127	5	30
Bromomethane	20.0	20.6		ug/Kg		103	60 - 120	0	30
Carbon disulfide	20.0	17.6		ug/Kg		88	64 - 133	1	30
Carbon tetrachloride	20.0	20.2		ug/Kg		101	64 - 120	2	30
Chlorobenzene	20.0	20.1		ug/Kg		100	74 - 120	0	30
Chloroethane	20.0	20.7		ug/Kg		104	55 - 127	1	30
Chloroform	20.0	18.9		ug/Kg		95	73 - 120	1	30
Chloromethane	20.0	19.7		ug/Kg		99	43 - 120	1	30
cis-1,3-Dichloropropene	20.0	19.6		ug/Kg		98	66 - 120	0	30
Dibromochloromethane	20.0	19.2		ug/Kg		96	69 - 125	0	30
Ethylbenzene	20.0	19.6		ug/Kg		98	72 - 118	0	30
Methyl Ethyl Ketone	250	218		ug/Kg		87	48 - 142	4	30
methyl isobutyl ketone	250	275		ug/Kg		110	67 - 138	4	30
Methylene Chloride	20.0	21.3		ug/Kg		106	76 - 122	2	30
m-Xylene & p-Xylene	40.0	40.1		ug/Kg		100	80 - 120	1	30
o-Xylene	20.0	19.9		ug/Kg		99	75 - 120	1	30
Styrene	20.0	20.1		ug/Kg		100	76 - 120	1	30
Tetrachloroethene	20.0	20.1		ug/Kg		101	73 - 120	2	30
Toluene	20.0	20.1		ug/Kg		100	71 - 120	0	30
trans-1,2-Dichloroethene	20.0	21.1		ug/Kg		105	71 - 126	1	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-636474/6
Matrix: Solid
Analysis Batch: 636474

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	20.0	19.4		ug/Kg		97	68 - 122	1	30
Trichloroethene	20.0	20.6		ug/Kg		104	72 - 120	0	30
Trichlorofluoromethane	20.0	20.3		ug/Kg		101	49 - 120	1	30
Vinyl chloride	20.0	20.3		ug/Kg		102	52 - 120	0	30
Xylenes, Total	60.0	60.0		ug/Kg		100	75 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*54 - 135*
4-Bromofluorobenzene (Surr)	*97*		*50 - 131*
Dibromofluoromethane (Surr)	*94*		*50 - 141*
Toluene-d8 (Surr)	*97*		*52 - 141*

Lab Sample ID: LCSD 410-636474/8
Matrix: Solid
Analysis Batch: 636474

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	100	86.5		ug/Kg		87	68 - 128	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*54 - 135*
4-Bromofluorobenzene (Surr)	*93*		*50 - 131*
Dibromofluoromethane (Surr)	*95*		*50 - 141*
Toluene-d8 (Surr)	*95*		*52 - 141*

Lab Sample ID: MB 410-637860/8
Matrix: Solid
Analysis Batch: 637860

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250		ug/Kg			04/30/25 20:29	50
1,1,2,2-Tetrachloroethane	ND		250		ug/Kg			04/30/25 20:29	50
1,1,2-Trichloroethane	ND		250		ug/Kg			04/30/25 20:29	50
1,1-Dichloroethane	ND		250		ug/Kg			04/30/25 20:29	50
1,1-Dichloroethene	ND		250		ug/Kg			04/30/25 20:29	50
1,2-Dichlorobenzene	ND		250		ug/Kg			04/30/25 20:29	50
1,2-Dichloroethane	ND		250		ug/Kg			04/30/25 20:29	50
1,2-Dichloropropane	ND		250		ug/Kg			04/30/25 20:29	50
1,3-Dichlorobenzene	ND		250		ug/Kg			04/30/25 20:29	50
1,4-Dichlorobenzene	ND		250		ug/Kg			04/30/25 20:29	50
2-Chloroethyl vinyl ether	ND		500		ug/Kg			04/30/25 20:29	50
2-Hexanone	ND		500		ug/Kg			04/30/25 20:29	50
Acetone	ND		1000		ug/Kg			04/30/25 20:29	50
Benzene	ND		250		ug/Kg			04/30/25 20:29	50
Bromodichloromethane	ND		250		ug/Kg			04/30/25 20:29	50
Bromoform	ND		500		ug/Kg			04/30/25 20:29	50
Bromomethane	ND		250		ug/Kg			04/30/25 20:29	50
Carbon disulfide	ND		250		ug/Kg			04/30/25 20:29	50

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-637860/8
Matrix: Solid
Analysis Batch: 637860

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		250		ug/Kg			04/30/25 20:29	50
Chlorobenzene	ND		250		ug/Kg			04/30/25 20:29	50
Chloroethane	ND		250		ug/Kg			04/30/25 20:29	50
Chloroform	ND		250		ug/Kg			04/30/25 20:29	50
Chloromethane	ND		250		ug/Kg			04/30/25 20:29	50
cis-1,3-Dichloropropene	ND		250		ug/Kg			04/30/25 20:29	50
Dibromochloromethane	ND		250		ug/Kg			04/30/25 20:29	50
Ethylbenzene	ND		250		ug/Kg			04/30/25 20:29	50
Methyl Ethyl Ketone	ND		500		ug/Kg			04/30/25 20:29	50
methyl isobutyl ketone	ND		500		ug/Kg			04/30/25 20:29	50
Methylene Chloride	ND		250		ug/Kg			04/30/25 20:29	50
m-Xylene & p-Xylene	ND		250		ug/Kg			04/30/25 20:29	50
o-Xylene	ND		250		ug/Kg			04/30/25 20:29	50
Styrene	ND		250		ug/Kg			04/30/25 20:29	50
Tetrachloroethene	ND		250		ug/Kg			04/30/25 20:29	50
Toluene	ND		250		ug/Kg			04/30/25 20:29	50
trans-1,2-Dichloroethene	ND		250		ug/Kg			04/30/25 20:29	50
trans-1,3-Dichloropropene	ND		250		ug/Kg			04/30/25 20:29	50
Trichloroethene	ND		250		ug/Kg			04/30/25 20:29	50
Trichlorofluoromethane	ND		250		ug/Kg			04/30/25 20:29	50
Vinyl acetate	ND		500		ug/Kg			04/30/25 20:29	50
Vinyl chloride	ND		250		ug/Kg			04/30/25 20:29	50
Xylenes, Total	ND		250		ug/Kg			04/30/25 20:29	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*54 - 135*		*04/30/25 20:29*	*50*
4-Bromofluorobenzene (Surr)	*94*		*50 - 131*		*04/30/25 20:29*	*50*
Dibromofluoromethane (Surr)	*91*		*50 - 141*		*04/30/25 20:29*	*50*
Toluene-d8 (Surr)	*90*		*52 - 141*		*04/30/25 20:29*	*50*

Lab Sample ID: LCS 410-637860/7
Matrix: Solid
Analysis Batch: 637860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1000	1050		ug/Kg		105	69 - 123
1,1,2,2-Tetrachloroethane	1000	869		ug/Kg		87	69 - 125
1,1,2-Trichloroethane	1000	969		ug/Kg		97	76 - 120
1,1-Dichloroethane	1000	1090		ug/Kg		109	68 - 120
1,1-Dichloroethene	1000	1140		ug/Kg		114	73 - 129
1,2-Dichlorobenzene	1000	897		ug/Kg		90	74 - 120
1,2-Dichloroethane	1000	1030		ug/Kg		103	72 - 124
1,2-Dichloropropane	1000	1020		ug/Kg		102	70 - 124
1,3-Dichlorobenzene	1000	913		ug/Kg		91	75 - 120
1,4-Dichlorobenzene	1000	927		ug/Kg		93	76 - 122
2-Chloroethyl vinyl ether	1000	830		ug/Kg		83	68 - 120
2-Hexanone	12500	10100		ug/Kg		81	54 - 140
Acetone	12500	14600		ug/Kg		117	28 - 169

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-637860/7
Matrix: Solid
Analysis Batch: 637860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1000	1040		ug/Kg		104	80 - 120
Bromodichloromethane	1000	977		ug/Kg		98	70 - 120
Bromoform	1000	796		ug/Kg		80	66 - 127
Bromomethane	1000	4650	*+	ug/Kg		465	60 - 120
Carbon disulfide	1000	986		ug/Kg		99	64 - 133
Carbon tetrachloride	1000	1010		ug/Kg		101	64 - 120
Chlorobenzene	1000	986		ug/Kg		99	74 - 120
Chloroethane	1000	3960	*+	ug/Kg		396	55 - 127
Chloroform	1000	1060		ug/Kg		106	73 - 120
Chloromethane	1000	1050		ug/Kg		105	43 - 120
cis-1,3-Dichloropropene	1000	884		ug/Kg		88	66 - 120
Dibromochloromethane	1000	908		ug/Kg		91	69 - 125
Ethylbenzene	1000	978		ug/Kg		98	72 - 118
Methyl Ethyl Ketone	12500	16600		ug/Kg		133	48 - 142
methyl isobutyl ketone	12500	10600		ug/Kg		85	67 - 138
Methylene Chloride	1000	1110		ug/Kg		111	76 - 122
m-Xylene & p-Xylene	2000	1940		ug/Kg		97	80 - 120
o-Xylene	1000	943		ug/Kg		94	75 - 120
Styrene	1000	931		ug/Kg		93	76 - 120
Tetrachloroethene	1000	955		ug/Kg		95	73 - 120
Toluene	1000	1010		ug/Kg		101	71 - 120
trans-1,2-Dichloroethene	1000	1080		ug/Kg		108	71 - 126
trans-1,3-Dichloropropene	1000	662		ug/Kg		86	68 - 122
Trichloroethene	1000	1020		ug/Kg		102	72 - 120
Trichlorofluoromethane	1000	1070		ug/Kg		107	49 - 120
Vinyl chloride	1000	1100		ug/Kg		110	52 - 120
Xylenes, Total	3000	2880		ug/Kg		96	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*54 - 135*
4-Bromofluorobenzene (Surr)	*100*		*50 - 131*
Dibromofluoromethane (Surr)	*94*		*50 - 141*
Toluene-d8 (Surr)	*94*		*52 - 141*

Lab Sample ID: LCSD 410-637860/9
Matrix: Solid
Analysis Batch: 637860

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	1050		ug/Kg		105	69 - 123	0	30
1,1,2,2-Tetrachloroethane	1000	854		ug/Kg		85	69 - 125	2	30
1,1,2-Trichloroethane	1000	961		ug/Kg		96	76 - 120	1	30
1,1-Dichloroethane	1000	1070		ug/Kg		107	68 - 120	2	30
1,1-Dichloroethene	1000	1150		ug/Kg		115	73 - 129	1	30
1,2-Dichlorobenzene	1000	903		ug/Kg		90	74 - 120	1	30
1,2-Dichloroethane	1000	1040		ug/Kg		104	72 - 124	1	30
1,2-Dichloropropane	1000	1030		ug/Kg		103	70 - 124	1	30
1,3-Dichlorobenzene	1000	899		ug/Kg		90	75 - 120	2	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-637860/9
Matrix: Solid
Analysis Batch: 637860

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	1000	908		ug/Kg		91	76 - 122	2	30
2-Chloroethyl vinyl ether	1000	833		ug/Kg		83	68 - 120	0	30
2-Hexanone	12500	9920		ug/Kg		79	54 - 140	2	30
Acetone	12500	14900		ug/Kg		119	28 - 169	2	30
Benzene	1000	1040		ug/Kg		104	80 - 120	1	30
Bromodichloromethane	1000	970		ug/Kg		97	70 - 120	1	30
Bromoform	1000	804		ug/Kg		80	66 - 127	1	30
Bromomethane	1000	4540	*+	ug/Kg		454	60 - 120	2	30
Carbon disulfide	1000	968		ug/Kg		97	64 - 133	2	30
Carbon tetrachloride	1000	1010		ug/Kg		101	64 - 120	1	30
Chlorobenzene	1000	977		ug/Kg		98	74 - 120	1	30
Chloroethane	1000	3770	*+	ug/Kg		377	55 - 127	5	30
Chloroform	1000	1060		ug/Kg		106	73 - 120	0	30
Chloromethane	1000	1040		ug/Kg		104	43 - 120	1	30
cis-1,3-Dichloropropene	1000	882		ug/Kg		88	66 - 120	0	30
Dibromochloromethane	1000	903		ug/Kg		90	69 - 125	1	30
Ethylbenzene	1000	970		ug/Kg		97	72 - 118	1	30
Methyl Ethyl Ketone	12500	15600		ug/Kg		125	48 - 142	7	30
methyl isobutyl ketone	12500	10800		ug/Kg		86	67 - 138	2	30
Methylene Chloride	1000	1110		ug/Kg		111	76 - 122	0	30
m-Xylene & p-Xylene	2000	1940		ug/Kg		97	80 - 120	0	30
o-Xylene	1000	942		ug/Kg		94	75 - 120	0	30
Styrene	1000	926		ug/Kg		93	76 - 120	1	30
Tetrachloroethene	1000	949		ug/Kg		95	73 - 120	1	30
Toluene	1000	999		ug/Kg		100	71 - 120	1	30
trans-1,2-Dichloroethene	1000	1080		ug/Kg		108	71 - 126	0	30
trans-1,3-Dichloropropene	1000	852		ug/Kg		85	68 - 122	1	30
Trichloroethene	1000	1020		ug/Kg		102	72 - 120	1	30
Trichlorofluoromethane	1000	1060		ug/Kg		105	49 - 120	1	30
Vinyl chloride	1000	1100		ug/Kg		110	52 - 120	0	30
Xylenes, Total	3000	2880		ug/Kg		96	75 - 120	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*54 - 135*
4-Bromofluorobenzene (Surr)	*99*		*50 - 131*
Dibromofluoromethane (Surr)	*94*		*50 - 141*
Toluene-d8 (Surr)	*93*		*52 - 141*

Lab Sample ID: MB 410-639726/8
Matrix: Solid
Analysis Batch: 639726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250		ug/Kg			05/05/25 20:07	50
1,1,2,2-Tetrachloroethane	ND		250		ug/Kg			05/05/25 20:07	50
1,1,2-Trichloroethane	ND		250		ug/Kg			05/05/25 20:07	50
1,1-Dichloroethane	ND		250		ug/Kg			05/05/25 20:07	50
1,1-Dichloroethene	ND		250		ug/Kg			05/05/25 20:07	50

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-639726/8
Matrix: Solid
Analysis Batch: 639726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		250		ug/Kg			05/05/25 20:07	50
1,2-Dichloroethane	ND		250		ug/Kg			05/05/25 20:07	50
1,2-Dichloropropane	ND		250		ug/Kg			05/05/25 20:07	50
1,3-Dichlorobenzene	ND		250		ug/Kg			05/05/25 20:07	50
1,4-Dichlorobenzene	ND		250		ug/Kg			05/05/25 20:07	50
2-Chloroethyl vinyl ether	ND		500		ug/Kg			05/05/25 20:07	50
2-Hexanone	ND		500		ug/Kg			05/05/25 20:07	50
Acetone	ND		1000		ug/Kg			05/05/25 20:07	50
Benzene	ND		250		ug/Kg			05/05/25 20:07	50
Bromodichloromethane	ND		250		ug/Kg			05/05/25 20:07	50
Bromoform	ND		500		ug/Kg			05/05/25 20:07	50
Bromomethane	ND		250		ug/Kg			05/05/25 20:07	50
Carbon disulfide	ND		250		ug/Kg			05/05/25 20:07	50
Carbon tetrachloride	ND		250		ug/Kg			05/05/25 20:07	50
Chlorobenzene	ND		250		ug/Kg			05/05/25 20:07	50
Chloroethane	ND		250		ug/Kg			05/05/25 20:07	50
Chloroform	ND		250		ug/Kg			05/05/25 20:07	50
Chloromethane	ND		250		ug/Kg			05/05/25 20:07	50
cis-1,3-Dichloropropene	ND		250		ug/Kg			05/05/25 20:07	50
Dibromochloromethane	ND		250		ug/Kg			05/05/25 20:07	50
Ethylbenzene	ND		250		ug/Kg			05/05/25 20:07	50
Methyl Ethyl Ketone	ND		500		ug/Kg			05/05/25 20:07	50
methyl isobutyl ketone	ND		500		ug/Kg			05/05/25 20:07	50
Methylene Chloride	ND		250		ug/Kg			05/05/25 20:07	50
m-Xylene & p-Xylene	ND		250		ug/Kg			05/05/25 20:07	50
o-Xylene	ND		250		ug/Kg			05/05/25 20:07	50
Styrene	ND		250		ug/Kg			05/05/25 20:07	50
Tetrachloroethene	ND		250		ug/Kg			05/05/25 20:07	50
Toluene	ND		250		ug/Kg			05/05/25 20:07	50
trans-1,2-Dichloroethene	ND		250		ug/Kg			05/05/25 20:07	50
trans-1,3-Dichloropropene	ND		250		ug/Kg			05/05/25 20:07	50
Trichloroethene	ND		250		ug/Kg			05/05/25 20:07	50
Trichlorofluoromethane	ND		250		ug/Kg			05/05/25 20:07	50
Vinyl acetate	ND		500		ug/Kg			05/05/25 20:07	50
Vinyl chloride	ND		250		ug/Kg			05/05/25 20:07	50
Xylenes, Total	ND		250		ug/Kg			05/05/25 20:07	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*54 - 135*		*05/05/25 20:07*	*50*
4-Bromofluorobenzene (Surr)	*97*		*50 - 131*		*05/05/25 20:07*	*50*
Dibromofluoromethane (Surr)	*93*		*50 - 141*		*05/05/25 20:07*	*50*
Toluene-d8 (Surr)	*94*		*52 - 141*		*05/05/25 20:07*	*50*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-639726/10
Matrix: Solid
Analysis Batch: 639726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	100	104		ug/Kg		104	68 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*54 - 135*
4-Bromofluorobenzene (Surr)	*94*		*50 - 131*
Dibromofluoromethane (Surr)	*90*		*50 - 141*
Toluene-d8 (Surr)	*91*		*52 - 141*

Lab Sample ID: LCS 410-639726/7
Matrix: Solid
Analysis Batch: 639726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1000	1040		ug/Kg		104	69 - 123
1,1,2,2-Tetrachloroethane	1000	917		ug/Kg		92	69 - 125
1,1,2-Trichloroethane	1000	996		ug/Kg		100	76 - 120
1,1-Dichloroethane	1000	1090		ug/Kg		109	68 - 120
1,1-Dichloroethene	1000	1120		ug/Kg		112	73 - 129
1,2-Dichlorobenzene	1000	943		ug/Kg		94	74 - 120
1,2-Dichloroethane	1000	1050		ug/Kg		105	72 - 124
1,2-Dichloropropane	1000	1040		ug/Kg		104	70 - 124
1,3-Dichlorobenzene	1000	942		ug/Kg		94	75 - 120
1,4-Dichlorobenzene	1000	962		ug/Kg		96	76 - 122
2-Chloroethyl vinyl ether	1000	841		ug/Kg		84	68 - 120
2-Hexanone	12500	10500		ug/Kg		84	54 - 140
Acetone	12500	13600		ug/Kg		109	28 - 169
Benzene	1000	1040		ug/Kg		104	80 - 120
Bromodichloromethane	1000	979		ug/Kg		98	70 - 120
Bromoform	1000	802		ug/Kg		80	66 - 127
Bromomethane	1000	3340	*+	ug/Kg		334	60 - 120
Carbon disulfide	1000	964		ug/Kg		96	64 - 133
Carbon tetrachloride	1000	999		ug/Kg		100	64 - 120
Chlorobenzene	1000	1010		ug/Kg		101	74 - 120
Chloroethane	1000	2830	*+	ug/Kg		283	55 - 127
Chloroform	1000	1070		ug/Kg		107	73 - 120
Chloromethane	1000	973		ug/Kg		97	43 - 120
cis-1,3-Dichloropropene	1000	896		ug/Kg		90	66 - 120
Dibromochloromethane	1000	914		ug/Kg		91	69 - 125
Ethylbenzene	1000	1000		ug/Kg		100	72 - 118
Methyl Ethyl Ketone	12500	14200		ug/Kg		114	48 - 142
methyl isobutyl ketone	12500	11200		ug/Kg		90	67 - 138
Methylene Chloride	1000	1120		ug/Kg		112	76 - 122
m-Xylene & p-Xylene	2000	1980		ug/Kg		99	80 - 120
o-Xylene	1000	958		ug/Kg		96	75 - 120
Styrene	1000	953		ug/Kg		95	76 - 120
Tetrachloroethene	1000	972		ug/Kg		97	73 - 120
Toluene	1000	1020		ug/Kg		102	71 - 120
trans-1,2-Dichloroethene	1000	1090		ug/Kg		109	71 - 126

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-639726/7
Matrix: Solid
Analysis Batch: 639726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,3-Dichloropropene	1000	891		ug/Kg		89	68 - 122
Trichloroethene	1000	1030		ug/Kg		103	72 - 120
Trichlorofluoromethane	1000	1060		ug/Kg		106	49 - 120
Vinyl chloride	1000	1030		ug/Kg		103	52 - 120
Xylenes, Total	3000	2940		ug/Kg		98	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*54 - 135*
4-Bromofluorobenzene (Surr)	*103*		*50 - 131*
Dibromofluoromethane (Surr)	*95*		*50 - 141*
Toluene-d8 (Surr)	*96*		*52 - 141*

Lab Sample ID: LCSD 410-639726/11
Matrix: Solid
Analysis Batch: 639726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	100	108		ug/Kg		108	68 - 128	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*54 - 135*
4-Bromofluorobenzene (Surr)	*95*		*50 - 131*
Dibromofluoromethane (Surr)	*90*		*50 - 141*
Toluene-d8 (Surr)	*90*		*52 - 141*

Lab Sample ID: LCSD 410-639726/9
Matrix: Solid
Analysis Batch: 639726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	1020		ug/Kg		102	69 - 123	2	30
1,1,2,2-Tetrachloroethane	1000	907		ug/Kg		91	69 - 125	1	30
1,1,2-Trichloroethane	1000	973		ug/Kg		97	76 - 120	2	30
1,1-Dichloroethane	1000	1050		ug/Kg		105	68 - 120	3	30
1,1-Dichloroethene	1000	1110		ug/Kg		111	73 - 129	1	30
1,2-Dichlorobenzene	1000	928		ug/Kg		93	74 - 120	2	30
1,2-Dichloroethane	1000	1020		ug/Kg		102	72 - 124	3	30
1,2-Dichloropropane	1000	1020		ug/Kg		102	70 - 124	2	30
1,3-Dichlorobenzene	1000	914		ug/Kg		91	75 - 120	3	30
1,4-Dichlorobenzene	1000	932		ug/Kg		93	76 - 122	3	30
2-Chloroethyl vinyl ether	1000	827		ug/Kg		83	68 - 120	2	30
2-Hexanone	12500	10500		ug/Kg		84	54 - 140	1	30
Acetone	12500	14800		ug/Kg		118	28 - 189	8	30
Benzene	1000	1010		ug/Kg		101	80 - 120	3	30
Bromodichloromethane	1000	960		ug/Kg		96	70 - 120	2	30
Bromoform	1000	784		ug/Kg		78	66 - 127	2	30
Bromomethane	1000	3000	*+	ug/Kg		300	60 - 120	11	30
Carbon disulfide	1000	941		ug/Kg		94	64 - 133	2	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-639726/9
Matrix: Solid
Analysis Batch: 639726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon tetrachloride	1000	981		ug/Kg		98	64 - 120	2	30
Chlorobenzene	1000	982		ug/Kg		98	74 - 120	3	30
Chloroethane	1000	2710	*+	ug/Kg		271	55 - 127	4	30
Chloroform	1000	1040		ug/Kg		104	73 - 120	3	30
Chloromethane	1000	970		ug/Kg		97	43 - 120	0	30
cis-1,3-Dichloropropene	1000	870		ug/Kg		87	66 - 120	3	30
Dibromochloromethane	1000	903		ug/Kg		90	69 - 125	1	30
Ethylbenzene	1000	968		ug/Kg		97	72 - 118	3	30
Methyl Ethyl Ketone	12500	14700		ug/Kg		117	48 - 142	3	30
methyl isobutyl ketone	12500	11000		ug/Kg		88	67 - 138	2	30
Methylene Chloride	1000	1080		ug/Kg		108	76 - 122	3	30
m-Xylene & p-Xylene	2000	1900		ug/Kg		95	80 - 120	4	30
o-Xylene	1000	928		ug/Kg		93	75 - 120	3	30
Styrene	1000	930		ug/Kg		93	76 - 120	3	30
Tetrachloroethene	1000	940		ug/Kg		94	73 - 120	3	30
Toluene	1000	997		ug/Kg		100	71 - 120	2	30
trans-1,2-Dichloroethene	1000	1030		ug/Kg		103	71 - 126	5	30
trans-1,3-Dichloropropene	1000	860		ug/Kg		86	68 - 122	4	30
Trichloroethene	1000	1010		ug/Kg		101	72 - 120	2	30
Trichlorofluoromethane	1000	1030		ug/Kg		103	49 - 120	3	30
Vinyl chloride	1000	1020		ug/Kg		102	52 - 120	1	30
Xylenes, Total	3000	2830		ug/Kg		94	75 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*54 - 135*
4-Bromofluorobenzene (Surr)	*101*		*50 - 131*
Dibromofluoromethane (Surr)	*92*		*50 - 141*
Toluene-d8 (Surr)	*93*		*52 - 141*

Lab Sample ID: MB 410-641204/7
Matrix: Solid
Analysis Batch: 641204

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010		mg/L			05/08/25 11:25	1
1,2-Dichloroethane	ND		0.0010		mg/L			05/08/25 11:25	1
Naphthalene	ND		0.0050		mg/L			05/08/25 11:25	1
Benzene	ND		0.0010		mg/L			05/08/25 11:25	1
Carbon tetrachloride	ND		0.0010		mg/L			05/08/25 11:25	1
Chlorobenzene	ND		0.0010		mg/L			05/08/25 11:25	1
Chloroform	ND		0.0010		mg/L			05/08/25 11:25	1
2-Butanone (MEK)	ND		0.010		mg/L			05/08/25 11:25	1
Tetrachloroethene	ND		0.0010		mg/L			05/08/25 11:25	1
Trichloroethene	ND		0.0010		mg/L			05/08/25 11:25	1
Vinyl chloride	ND		0.0010		mg/L			05/08/25 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*05/08/25 11:25*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-641204/7
Matrix: Solid
Analysis Batch: 641204

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		80 - 120		05/08/25 11:25	1
Dibromofluoromethane (Surr)	106		80 - 120		05/08/25 11:25	1
Toluene-d8 (Surr)	98		80 - 120		05/08/25 11:25	1

Lab Sample ID: LCS 410-641204/4
Matrix: Solid
Analysis Batch: 641204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	0.0200	0.0183		mg/L		91	80 - 131
1,2-Dichloroethane	0.0200	0.0209		mg/L		105	73 - 124
Naphthalene	0.0200	0.0183		mg/L		91	67 - 124
Benzene	0.0200	0.0171		mg/L		86	80 - 120
Carbon tetrachloride	0.0200	0.0205		mg/L		103	64 - 134
Chlorobenzene	0.0200	0.0179		mg/L		89	80 - 120
Chloroform	0.0200	0.0187		mg/L		94	80 - 120
2-Butanone (MEK)	0.250	0.252		mg/L		101	59 - 135
Tetrachloroethene	0.0200	0.0170		mg/L		85	80 - 120
Trichloroethene	0.0200	0.0178		mg/L		88	80 - 120
Vinyl chloride	0.0200	0.0203		mg/L		101	56 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	110		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: LCSD 410-641204/5
Matrix: Solid
Analysis Batch: 641204

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	0.0200	0.0198		mg/L		99	80 - 131	8	30
1,2-Dichloroethane	0.0200	0.0221		mg/L		111	73 - 124	8	30
Naphthalene	0.0200	0.0167		mg/L		84	67 - 124	9	30
Benzene	0.0200	0.0187		mg/L		94	80 - 120	9	30
Carbon tetrachloride	0.0200	0.0224		mg/L		112	64 - 134	9	30
Chlorobenzene	0.0200	0.0188		mg/L		94	80 - 120	5	30
Chloroform	0.0200	0.0206		mg/L		103	80 - 120	9	30
2-Butanone (MEK)	0.250	0.264		mg/L		105	59 - 135	5	30
Tetrachloroethene	0.0200	0.0179		mg/L		90	80 - 120	5	30
Trichloroethene	0.0200	0.0188		mg/L		94	80 - 120	7	30
Vinyl chloride	0.0200	0.0219		mg/L		110	56 - 120	8	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	110		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-641204/5
Matrix: Solid
Analysis Batch: 641204

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 410-218379-U-1-A MS
Matrix: Solid
Analysis Batch: 641204

Client Sample ID: Matrix Spike
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	ND		0.400	0.447		mg/L		112	74 - 121
1,2-Dichloroethane	ND		0.400	0.440		mg/L		110	69 - 120
Naphthalene	ND	^c	0.400	0.272		mg/L		68	62 - 120
Benzene	ND		0.400	0.382		mg/L		96	81 - 120
Carbon tetrachloride	ND		0.400	0.484		mg/L		121	63 - 128
Chlorobenzene	ND		0.400	0.383		mg/L		96	80 - 120
Chloroform	ND		0.400	0.411		mg/L		103	74 - 120
2-Butanone (MEK)	ND		5.00	4.43		mg/L		89	65 - 131
Tetrachloroethene	ND		0.400	0.387		mg/L		97	68 - 125
Trichloroethene	ND		0.400	0.409		mg/L		102	76 - 120
Vinyl chloride	ND		0.400	0.282		mg/L		71	52 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-494607/1-A
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Acenaphthylene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Acetophenone	ND		340		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Anthracene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Atrazine	ND		340		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Benzaldehyde	ND		340		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Benzo[a]anthracene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Benzo[b]fluoranthene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Benzo[k]fluoranthene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Benzo[g,h,i]perylene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Benzo[a]pyrene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
1,1'-Biphenyl	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Bis(2-chloroethoxy)methane	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Bis(2-chloroethyl)ether	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2,2'-oxybis[1-chloropropane]	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Bis(2-ethylhexyl) phthalate	ND		1700		ug/Kg		04/24/25 12:09	04/25/25 11:31	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-494607/1-A
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Butyl benzyl phthalate	ND		840		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Caprolactam	ND		850		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Carbazole	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
4-Chloroaniline	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
4-Chloro-3-methylphenol	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2-Chloronaphthalene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2-Chlorophenol	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
4-Chlorophenyl phenyl ether	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Chrysene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Dibenz(a,h)anthracene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Dibenzofuran	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Di-n-butyl phthalate	ND		1700		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
3,3'-Dichlorobenzidine	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2,4-Dichlorophenol	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Diethyl phthalate	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2,4-Dimethylphenol	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Dimethyl phthalate	ND		340		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
4,6-Dinitro-2-methylphenol	ND		850		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2,4-Dinitrophenol	ND		1700		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2,4-Dinitrotoluene	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2,6-Dinitrotoluene	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Di-n-octyl phthalate	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Fluoranthene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Fluorene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Hexachlorobenzene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Hexachlorobutadiene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Hexachlorocyclopentadiene	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Hexachloroethane	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Indeno[1,2,3-cd]pyrene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Isophorone	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2-Methylnaphthalene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2-Methylphenol	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Methylphenol, 3 & 4	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Naphthalene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2-Nitroaniline	ND		850		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
3-Nitroaniline	ND		850		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
4-Nitroaniline	ND		850		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Nitrobenzene	ND		340		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2-Nitrophenol	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
4-Nitrophenol	ND		850		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
N-Nitrosodiphenylamine	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
N-Nitrosodi-n-propylamine	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Pentachlorophenol	ND		850		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Phenanthrene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Phenol	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
Pyrene	ND		34		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2,4,5-Trichlorophenol	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1
2,4,6-Trichlorophenol	ND		170		ug/Kg		04/24/25 12:09	04/25/25 11:31	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	56		44 - 105	04/24/25 12:09	04/25/25 11:31	1
2-Fluorophenol	60		48 - 105	04/24/25 12:09	04/25/25 11:31	1
2,4,6-Tribromophenol	57		34 - 108	04/24/25 12:09	04/25/25 11:31	1
Nitrobenzene-d5	51		46 - 105	04/24/25 12:09	04/25/25 11:31	1
Phenol-d5	58		46 - 105	04/24/25 12:09	04/25/25 11:31	1
Terphenyl-d14	54		39 - 105	04/24/25 12:09	04/25/25 11:31	1

Lab Sample ID: LCS 180-494607/2-A
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3330	2150		ug/Kg		65	50 - 100
Acenaphthylene	3330	2170		ug/Kg		65	52 - 100
Acetophenone	3330	2150		ug/Kg		64	48 - 100
Anthracene	3330	2080		ug/Kg		62	53 - 100
Atrazine	3330	2340		ug/Kg		70	49 - 103
Benzaldehyde	3330	1200		ug/Kg		36	23 - 105
Benzo[a]anthracene	3330	2120		ug/Kg		64	51 - 100
Benzo[b]fluoranthene	3330	1970		ug/Kg		59	48 - 100
Benzo[k]fluoranthene	3330	1780		ug/Kg		53	19 - 100
Benzo[g,h,i]perylene	3330	2130		ug/Kg		64	48 - 105
Benzo[a]pyrene	3330	2100		ug/Kg		63	51 - 100
1,1'-Biphenyl	3330	2050		ug/Kg		62	50 - 100
Bis(2-chloroethoxy)methane	3330	2000		ug/Kg		60	49 - 100
Bis(2-chloroethyl)ether	3330	2030		ug/Kg		61	48 - 100
2,2'-oxybis[1-chloropropane]	3330	1690		ug/Kg		51	30 - 113
Bis(2-ethylhexyl) phthalate	3330	2050		ug/Kg		61	53 - 107
4-Bromophenyl phenyl ether	3330	2030		ug/Kg		61	52 - 101
Butyl benzyl phthalate	3330	2000		ug/Kg		60	52 - 107
Caprolactam	3330	2530		ug/Kg		76	48 - 111
Carbazole	3330	2130		ug/Kg		64	53 - 100
4-Chloroaniline	3330	2150		ug/Kg		65	47 - 100
4-Chloro-3-methylphenol	3330	2410		ug/Kg		72	49 - 106
2-Chloronaphthalene	3330	2000		ug/Kg		60	51 - 100
2-Chlorophenol	3330	2310		ug/Kg		69	51 - 100
4-Chlorophenyl phenyl ether	3330	2140		ug/Kg		64	52 - 100
Chrysene	3330	1990		ug/Kg		60	50 - 100
Dibenz(a,h)anthracene	3330	2170		ug/Kg		65	50 - 107
Dibenzofuran	3330	2040		ug/Kg		61	52 - 100
Di-n-butyl phthalate	3330	2020		ug/Kg		61	57 - 102
3,3'-Dichlorobenzidine	3330	2380		ug/Kg		71	43 - 100
2,4-Dichlorophenol	3330	2410		ug/Kg		72	53 - 101
Diethyl phthalate	3330	2150		ug/Kg		65	48 - 104
2,4-Dimethylphenol	3330	2740		ug/Kg		62	51 - 101
Dimethyl phthalate	3330	2160		ug/Kg		65	53 - 100
4,6-Dinitro-2-methylphenol	6670	4380		ug/Kg		66	51 - 100
2,4-Dinitrophenol	6670	4580		ug/Kg		69	33 - 101
2,4-Dinitrotoluene	3330	2330		ug/Kg		70	54 - 104
2,6-Dinitrotoluene	3330	2150		ug/Kg		65	51 - 106
Di-n-octyl phthalate	3330	1790		ug/Kg		54	41 - 106

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-494607/2-A
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoranthene	3330	2210		ug/Kg		66	55 - 100
Fluorene	3330	2120		ug/Kg		64	52 - 100
Hexachlorobenzene	3330	2050		ug/Kg		62	49 - 100
Hexachlorobutadiene	3330	2210		ug/Kg		66	38 - 107
Hexachlorocyclopentadiene	3330	2030		ug/Kg		61	33 - 117
Hexachloroethane	3330	2120		ug/Kg		64	47 - 100
Indeno[1,2,3-cd]pyrene	3330	2060		ug/Kg		62	51 - 103
Isophorone	3330	2090		ug/Kg		63	48 - 105
2-Methylnaphthalene	3330	2040		ug/Kg		61	53 - 100
2-Methylphenol	3330	2250		ug/Kg		67	50 - 101
Methylphenol, 3 & 4	3330	2310		ug/Kg		69	50 - 103
Naphthalene	3330	2190		ug/Kg		66	51 - 100
2-Nitroaniline	3330	2130		ug/Kg		64	42 - 123
3-Nitroaniline	3330	2420		ug/Kg		73	50 - 103
4-Nitroaniline	3330	2300		ug/Kg		69	52 - 103
Nitrobenzene	3330	1910		ug/Kg		57	44 - 108
2-Nitrophenol	3330	2560		ug/Kg		77	55 - 107
4-Nitrophenol	6670	4720		ug/Kg		71	30 - 134
N-Nitrosodiphenylamine	3330	2060		ug/Kg		82	52 - 100
N-Nitrosodi-n-propylamine	3330	2030		ug/Kg		61	45 - 107
Pentachlorophenol	6670	3940		ug/Kg		59	42 - 110
Phenanthrene	3330	2030		ug/Kg		61	53 - 100
Phenol	3330	2000		ug/Kg		60	49 - 100
Pyrene	3330	2010		ug/Kg		60	52 - 100
2,4,5-Trichlorophenol	3330	2250		ug/Kg		67	50 - 104
2,4,6-Trichlorophenol	3330	2210		ug/Kg		66	50 - 105

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*44 - 105*
2-Fluorophenol	*70*		*48 - 105*
2,4,6-Tribromophenol	*68*		*34 - 108*
Nitrobenzene-d5	*61*		*46 - 105*
Phenol-d5	*70*		*46 - 105*
Terphenyl-d14	*61*		*39 - 105*

Lab Sample ID: 180-189559-A-1-D MS
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 494607

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		4510	3590		ug/Kg	☼	80	50 - 100
Acenaphthylene	ND		4510	3530		ug/Kg	☼	78	52 - 100
Anthracene	ND		4510	3680		ug/Kg	☼	82	53 - 100
Benzo[a]anthracene	ND		4510	3820		ug/Kg	☼	84	51 - 100
Benzo[b]fluoranthene	55		4510	3240		ug/Kg	☼	71	48 - 100
Benzo[k]fluoranthene	ND		4510	3080		ug/Kg	☼	68	19 - 100
Benzo[g,h,i]perylene	ND		4510	3880		ug/Kg	☼	85	48 - 105
Benzo[a]pyrene	ND		4510	3560		ug/Kg	☼	78	51 - 100

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-189559-A-1-D MS
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 494607

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chrysene	ND		4510	3670		ug/Kg	☼	80	50 - 100
Dibenz(a,h)anthracene	ND		4510	3880		ug/Kg	☼	86	50 - 107
Fluoranthene	45		4510	3930		ug/Kg	☼	86	55 - 100
Fluorene	ND		4510	3550		ug/Kg	☼	79	52 - 100
Indeno[1,2,3-cd]pyrene	ND		4510	3690		ug/Kg	☼	81	51 - 103
2-Methylnaphthalene	ND		4510	3230		ug/Kg	☼	71	53 - 100
Naphthalene	ND		4510	3590		ug/Kg	☼	80	51 - 100
Phenanthrene	ND		4510	3930		ug/Kg	☼	86	53 - 100
Pyrene	45		4510	3740		ug/Kg	☼	82	52 - 100

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*44 - 105*
Nitrobenzene-d5	*74*		*46 - 105*
Terphenyl-d14	*73*		*39 - 105*

Lab Sample ID: 180-189559-A-1-E MSD
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 494607

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		4520	3480		ug/Kg	☼	77	50 - 100	3	20
Acenaphthylene	ND		4520	3440		ug/Kg	☼	76	52 - 100	3	20
Anthracene	ND		4520	3500		ug/Kg	☼	77	53 - 100	5	20
Benzo[a]anthracene	ND		4520	3610		ug/Kg	☼	79	51 - 100	5	21
Benzo[b]fluoranthene	55		4520	3260		ug/Kg	☼	71	48 - 100	0	20
Benzo[k]fluoranthene	ND		4520	2800		ug/Kg	☼	61	19 - 100	10	20
Benzo[g,h,i]perylene	ND		4520	3700		ug/Kg	☼	81	48 - 105	5	19
Benzo[a]pyrene	ND		4520	3400		ug/Kg	☼	74	51 - 100	5	20
Chrysene	ND		4520	3510		ug/Kg	☼	77	50 - 100	4	20
Dibenz(a,h)anthracene	ND		4520	3730		ug/Kg	☼	83	50 - 107	4	21
Fluoranthene	45		4520	3770		ug/Kg	☼	83	55 - 100	4	20
Fluorene	ND		4520	3440		ug/Kg	☼	76	52 - 100	3	19
Indeno[1,2,3-cd]pyrene	ND		4520	3570		ug/Kg	☼	78	51 - 103	3	19
2-Methylnaphthalene	ND		4520	2980		ug/Kg	☼	66	53 - 100	9	21
Naphthalene	ND		4520	3300		ug/Kg	☼	73	51 - 100	8	20
Phenanthrene	ND		4520	3770		ug/Kg	☼	83	53 - 100	4	20
Pyrene	45		4520	3560		ug/Kg	☼	78	52 - 100	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*44 - 105*
Nitrobenzene-d5	*69*		*46 - 105*
Terphenyl-d14	*69*		*39 - 105*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-494632/1-A
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494632

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
Pyridine	ND		0.10		mg/L		04/24/25 22:36	04/25/25 08:32	1
2,4-Dinitrotoluene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
Hexachlorobenzene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
Hexachlorobutadiene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
Hexachloroethane	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
2-Methylphenol	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
Methylphenol, 3 & 4	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
Nitrobenzene	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
Pentachlorophenol	ND		0.25		mg/L		04/24/25 22:36	04/25/25 08:32	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		04/24/25 22:36	04/25/25 08:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*10 - 130*	*04/24/25 22:36*	*04/25/25 08:32*	*1*
2-Fluorophenol	*63*		*10 - 130*	*04/24/25 22:36*	*04/25/25 08:32*	*1*
2,4,6-Tribromophenol	*59*		*10 - 130*	*04/24/25 22:36*	*04/25/25 08:32*	*1*
Nitrobenzene-d5	*58*		*10 - 130*	*04/24/25 22:36*	*04/25/25 08:32*	*1*
Phenol-d5	*63*		*10 - 130*	*04/24/25 22:36*	*04/25/25 08:32*	*1*
Terphenyl-d14	*57*		*10 - 130*	*04/24/25 22:36*	*04/25/25 08:32*	*1*

Lab Sample ID: LCS 180-494632/2-A
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494632

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	0.250	0.159		mg/L		63	10 - 130
Pyridine	0.250	0.194		mg/L		78	10 - 130
2,4-Dinitrotoluene	0.250	0.135		mg/L		54	10 - 130
Hexachlorobenzene	0.250	0.109		mg/L		44	10 - 130
Hexachlorobutadiene	0.250	0.148		mg/L		59	10 - 130
Hexachloroethane	0.250	0.145		mg/L		58	10 - 130
2-Methylphenol	0.250	0.157		mg/L		63	10 - 130
Methylphenol, 3 & 4	0.500	0.317		mg/L		63	10 - 130
Nitrobenzene	0.250	0.141		mg/L		57	10 - 130
Pentachlorophenol	0.250	0.107	J	mg/L		43	10 - 130
2,4,5-Trichlorophenol	0.250	0.152		mg/L		61	10 - 130
2,4,6-Trichlorophenol	0.250	0.139		mg/L		56	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*10 - 130*
2-Fluorophenol	*63*		*10 - 130*
2,4,6-Tribromophenol	*60*		*10 - 130*
Nitrobenzene-d5	*56*		*10 - 130*
Phenol-d5	*62*		*10 - 130*
Terphenyl-d14	*57*		*10 - 130*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-494632/3-A
Matrix: Solid
Analysis Batch: 494649

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 494632

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.250	0.156		mg/L		62	10 - 130	1	15
Pyridine	0.250	0.210		mg/L		84	10 - 130	8	15
2,4-Dinitrotoluene	0.250	0.139		mg/L		56	10 - 130	3	15
Hexachlorobenzene	0.250	0.115		mg/L		46	10 - 130	5	15
Hexachlorobutadiene	0.250	0.154		mg/L		62	10 - 130	4	15
Hexachloroethane	0.250	0.154		mg/L		61	10 - 130	6	15
2-Methylphenol	0.250	0.162		mg/L		65	10 - 130	3	15
Methylphenol, 3 & 4	0.500	0.345		mg/L		69	10 - 130	8	15
Nitrobenzene	0.250	0.145		mg/L		58	10 - 130	3	15
Pentachlorophenol	0.250	0.110	J	mg/L		44	10 - 130	2	27
2,4,5-Trichlorophenol	0.250	0.156		mg/L		62	10 - 130	3	15
2,4,6-Trichlorophenol	0.250	0.145		mg/L		58	10 - 130	4	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*10 - 130*
2-Fluorophenol	*65*		*10 - 130*
2,4,6-Tribromophenol	*64*		*10 - 130*
Nitrobenzene-d5	*59*		*10 - 130*
Phenol-d5	*66*		*10 - 130*
Terphenyl-d14	*60*		*10 - 130*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-494434/1-A
Matrix: Solid
Analysis Batch: 494455

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
alpha-BHC	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
beta-BHC	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
delta-BHC	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
gamma-BHC (Lindane)	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
cis-Chlordane	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
trans-Chlordane	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
4,4'-DDD	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Chlordane (technical)	ND		17		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
4,4'-DDE	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
4,4'-DDT	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Dieldrin	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Endosulfan I	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Endosulfan II	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Endosulfan sulfate	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Endrin	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Endrin aldehyde	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Endrin ketone	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Heptachlor	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Heptachlor epoxide	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 180-494434/1-A
Matrix: Solid
Analysis Batch: 494455

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methoxychlor	ND		1.7		ug/Kg		04/23/25 05:53	04/23/25 18:35	1
Toxaphene	ND		67		ug/Kg		04/23/25 05:53	04/23/25 18:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*53 - 124*	*04/23/25 05:53*	*04/23/25 18:35*	*1*
Tetrachloro-m-xylene	*124*		*53 - 124*	*04/23/25 05:53*	*04/23/25 18:35*	*1*
DCB Decachlorobiphenyl (Surr)	*103*		*36 - 142*	*04/23/25 05:53*	*04/23/25 18:35*	*1*
DCB Decachlorobiphenyl (Surr)	*99*		*36 - 142*	*04/23/25 05:53*	*04/23/25 18:35*	*1*

Lab Sample ID: LCS 180-494434/2-A
Matrix: Solid
Analysis Batch: 494455

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	33.3	44.8		ug/Kg		135	60 - 136
alpha-BHC	33.3	39.4		ug/Kg		118	62 - 138
beta-BHC	33.3	40.1		ug/Kg		120	60 - 130
delta-BHC	33.3	27.5		ug/Kg		83	41 - 138
gamma-BHC (Lindane)	33.3	40.7		ug/Kg		122	64 - 138
cis-Chlordane	33.3	43.2		ug/Kg		130	57 - 135
trans-Chlordane	33.3	44.0		ug/Kg		132	59 - 137
4,4'-DDD	33.3	36.6		ug/Kg		110	56 - 137
4,4'-DDE	33.3	38.2		ug/Kg		115	84 - 132
4,4'-DDT	33.3	40.7		ug/Kg		122	44 - 129
Dieldrin	33.3	42.0		ug/Kg		126	68 - 133
Endosulfan I	33.3	45.5		ug/Kg		136	53 - 148
Endosulfan II	33.3	41.0		ug/Kg		123	65 - 130
Endosulfan sulfate	33.3	37.9		ug/Kg		114	50 - 132
Endrin	33.3	45.6		ug/Kg		137	72 - 138
Endrin aldehyde	33.3	40.3		ug/Kg		121	47 - 139
Endrin ketone	33.3	41.3		ug/Kg		124	62 - 129
Heptachlor	33.3	43.9		ug/Kg		132	56 - 144
Heptachlor epoxide	33.3	45.2		ug/Kg		136	65 - 140
Methoxychlor	33.3	42.3		ug/Kg		127	37 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*94*		*53 - 124*
Tetrachloro-m-xylene	*118*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*108*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*112*		*36 - 142*

Lab Sample ID: 180-189451-1 MS
Matrix: Solid
Analysis Batch: 494455

Client Sample ID: 250422010-08
Prep Type: Total/NA
Prep Batch: 494434

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	ND	^c	96.9	117		ug/Kg	☼	121	60 - 136
alpha-BHC	ND	FH	96.9	98.6	p	ug/Kg	☼	102	62 - 138

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-189451-1 MS — **Client Sample ID: 250422010-08**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494455 — **Prep Batch: 494434**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
beta-BHC	ND	FH	96.9	93.3	p	ug/Kg	☼	96	60 - 130
delta-BHC	ND		96.9	80.6		ug/Kg	☼	83	41 - 136
gamma-BHC (Lindane)	ND	FH	96.9	132		ug/Kg	☼	136	64 - 138
cis-Chlordane	ND	FH	96.9	151	FH	ug/Kg	☼	156	57 - 135
trans-Chlordane	ND		96.9	157	FH	ug/Kg	☼	162	59 - 137
4,4'-DDD	ND		96.9	84.4		ug/Kg	☼	87	56 - 137
4,4'-DDE	ND		96.9	81.4		ug/Kg	☼	84	64 - 132
4,4'-DDT	ND		96.9	100		ug/Kg	☼	104	44 - 129
Dieldrin	ND		96.9	101		ug/Kg	☼	104	68 - 133
Endosulfan I	ND	^c	96.9	118		ug/Kg	☼	120	53 - 148
Endosulfan II	ND		96.9	94.3		ug/Kg	☼	97	65 - 130
Endosulfan sulfate	ND		96.9	92.5		ug/Kg	☼	95	50 - 132
Endrin	ND		96.9	100		ug/Kg	☼	104	72 - 138
Endrin aldehyde	ND	FL	98.9	ND	FL	ug/Kg	☼	21	47 - 139
Endrin ketone	ND		96.9	94.3		ug/Kg	☼	97	62 - 129
Heptachlor	ND	FH ^c	96.9	108	p	ug/Kg	☼	112	56 - 144
Heptachlor epoxide	ND		96.9	125		ug/Kg	☼	129	65 - 140
Methoxychlor	ND		96.9	108		ug/Kg	☼	112	37 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*120*		*53 - 124*
Tetrachloro-m-xylene	*98*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*104*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*122*		*36 - 142*

Lab Sample ID: 180-189451-1 MSD — **Client Sample ID: 250422010-08**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494455 — **Prep Batch: 494434**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	ND	^c	96.9	123		ug/Kg	☼	127	60 - 136	5	21
alpha-BHC	ND	FH	96.9	93.6	p	ug/Kg	☼	97	62 - 138	5	31
beta-BHC	ND	FH	96.9	95.3	p	ug/Kg	☼	98	60 - 130	2	30
delta-BHC	ND		96.9	86.0		ug/Kg	☼	69	41 - 136	7	23
gamma-BHC (Lindane)	ND	FH	96.9	136	FH	ug/Kg	☼	140	64 - 138	3	30
cis-Chlordane	ND	FH	96.9	151	FH	ug/Kg	☼	156	57 - 135	0	22
trans-Chlordane	ND		96.9	132		ug/Kg	☼	136	59 - 137	17	22
4,4'-DDD	ND		96.9	85.1		ug/Kg	☼	86	56 - 137	1	22
4,4'-DDE	ND		96.9	84.0		ug/Kg	☼	87	64 - 132	3	16
4,4'-DDT	ND		96.9	99.4		ug/Kg	☼	103	44 - 129	1	37
Dieldrin	ND		96.9	103		ug/Kg	☼	106	68 - 133	2	18
Endosulfan I	ND	^c	96.9	119		ug/Kg	☼	123	53 - 148	3	23
Endosulfan II	ND		96.9	99.8		ug/Kg	☼	103	65 - 130	6	18
Endosulfan sulfate	ND		96.9	88.6		ug/Kg	☼	91	50 - 132	4	21
Endrin	ND		96.9	101		ug/Kg	☼	105	72 - 138	1	17
Endrin aldehyde	ND	FL	96.9	ND	FL	ug/Kg	☼	0	47 - 139	NC	19
Endrin ketone	ND		96.9	97.6		ug/Kg	☼	101	62 - 129	3	21
Heptachlor	ND	FH ^c	96.9	103	p	ug/Kg	☼	106	56 - 144	6	19

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-189451-1 MSD
Matrix: Solid
Analysis Batch: 494455

Client Sample ID: 250422010-08
Prep Type: Total/NA
Prep Batch: 494434

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Heptachlor epoxide	ND		96.9	122		ug/Kg	☼	126	65 - 140	3	21
Methoxychlor	ND		96.9	104		ug/Kg	☼	108	37 - 140	4	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*116*		*53 - 124*
Tetrachloro-m-xylene	*89*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*100*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*119*		*36 - 142*

Lab Sample ID: MB 180-494631/1-A
Matrix: Solid
Analysis Batch: 494661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00050		mg/L		04/24/25 21:54	04/25/25 13:05	1
Chlordane (technical)	ND		0.0050		mg/L		04/24/25 21:54	04/25/25 13:05	1
Endrin	ND		0.00050		mg/L		04/24/25 21:54	04/25/25 13:05	1
Heptachlor	ND		0.00050		mg/L		04/24/25 21:54	04/25/25 13:05	1
Heptachlor epoxide	ND		0.00050		mg/L		04/24/25 21:54	04/25/25 13:05	1
Methoxychlor	ND		0.00050		mg/L		04/24/25 21:54	04/25/25 13:05	1
Toxaphene	ND		0.040		mg/L		04/24/25 21:54	04/25/25 13:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*15 - 141*	*04/24/25 21:54*	*04/25/25 13:05*	*1*
Tetrachloro-m-xylene	*91*		*15 - 141*	*04/24/25 21:54*	*04/25/25 13:05*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 120*	*04/24/25 21:54*	*04/25/25 13:05*	*1*
DCB Decachlorobiphenyl (Surr)	*85*		*33 - 120*	*04/24/25 21:54*	*04/25/25 13:05*	*1*

Lab Sample ID: LCS 180-494631/2-A
Matrix: Solid
Analysis Batch: 494661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494631

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-BHC (Lindane)	0.0100	0.00871		mg/L		87	62 - 120
Endrin	0.0100	0.0107		mg/L		107	62 - 138
Heptachlor	0.0100	0.0106		mg/L		106	53 - 119
Heptachlor epoxide	0.0100	0.0105		mg/L		105	63 - 125
Methoxychlor	0.0100	0.00813		mg/L		81	38 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*70*		*15 - 141*
Tetrachloro-m-xylene	*92*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*86*		*33 - 120*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 120*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 180-494631/3-A
Matrix: Solid
Analysis Batch: 494661

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 494631

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
gamma-BHC (Lindane)	0.0100	0.00921		mg/L		92	62 - 120	6	16
Endrin	0.0100	0.0106		mg/L		106	62 - 138	0	15
Heptachlor	0.0100	0.0105		mg/L		105	53 - 119	0	16
Heptachlor epoxide	0.0100	0.0102		mg/L		102	63 - 125	3	17
Methoxychlor	0.0100	0.00845		mg/L		85	38 - 137	4	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*68*		*15 - 141*
Tetrachloro-m-xylene	*92*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 120*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 120*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-494436/1-A
Matrix: Solid
Analysis Batch: 494463

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494436

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		04/23/25 06:05	04/23/25 14:23	1
PCB-1221	ND		17		ug/Kg		04/23/25 06:05	04/23/25 14:23	1
PCB-1232	ND		17		ug/Kg		04/23/25 06:05	04/23/25 14:23	1
PCB-1242	ND		17		ug/Kg		04/23/25 06:05	04/23/25 14:23	1
PCB-1248	ND		17		ug/Kg		04/23/25 06:05	04/23/25 14:23	1
PCB-1254	ND		17		ug/Kg		04/23/25 06:05	04/23/25 14:23	1
PCB-1260	ND		17		ug/Kg		04/23/25 06:05	04/23/25 14:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*76*		*17 - 144*	*04/23/25 06:05*	*04/23/25 14:23*	*1*
Tetrachloro-m-xylene (Surr)	*75*		*17 - 144*	*04/23/25 06:05*	*04/23/25 14:23*	*1*
DCB Decachlorobiphenyl (Surr)	*99*		*26 - 142*	*04/23/25 06:05*	*04/23/25 14:23*	*1*
DCB Decachlorobiphenyl (Surr)	*102*		*26 - 142*	*04/23/25 06:05*	*04/23/25 14:23*	*1*

Lab Sample ID: LCS 180-494436/2-A
Matrix: Solid
Analysis Batch: 494463

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494436

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1100		ug/Kg		82	53 - 115
PCB-1260	1330	1050		ug/Kg		79	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*93*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*92*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*90*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*95*		*26 - 142*

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-189424-O-1-B MS
Matrix: Solid
Analysis Batch: 494463

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 494436

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		1630	1050		ug/Kg	☼	64	53 - 115
PCB-1260	ND		1630	999		ug/Kg	☼	61	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*67*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*65*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*73*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*74*		*26 - 142*

Lab Sample ID: 180-189424-O-1-C MSD
Matrix: Solid
Analysis Batch: 494463

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 494436

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1620	1190		ug/Kg	☼	74	53 - 115	13	25
PCB-1260	ND		1620	1160		ug/Kg	☼	72	45 - 108	15	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*81*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*78*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*86*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*89*		*26 - 142*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-494442/1-A
Matrix: Solid
Analysis Batch: 494646

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494442

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		80		ug/Kg		04/23/25 07:18	04/25/25 08:30	1
2,4,5-T	ND		20		ug/Kg		04/23/25 07:18	04/25/25 08:30	1
Silvex (2,4,5-TP)	ND		20		ug/Kg		04/23/25 07:18	04/25/25 08:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*62*		*13 - 111*	*04/23/25 07:18*	*04/25/25 08:30*	*1*
2,4-Dichlorophenylacetic acid	*82*		*13 - 111*	*04/23/25 07:18*	*04/25/25 08:30*	*1*

Lab Sample ID: LCS 180-494442/2-A
Matrix: Solid
Analysis Batch: 494646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494442

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	400	340		ug/Kg		85	10 - 117
2,4,5-T	100	93.1		ug/Kg		93	11 - 129
Silvex (2,4,5-TP)	100	91.4		ug/Kg		91	10 - 125

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCS 180-494442/2-A
Matrix: Solid
Analysis Batch: 494646

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494442

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*85*		*13 - 111*
2,4-Dichlorophenylacetic acid	*85*		*13 - 111*

Lab Sample ID: LCSD 180-494442/3-A
Matrix: Solid
Analysis Batch: 494646

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 494442

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	400	320		ug/Kg		80	10 - 117	6	40
2,4,5-T	100	87.7		ug/Kg		88	11 - 129	6	40
Silvex (2,4,5-TP)	100	87.2		ug/Kg		87	10 - 125	5	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*82*		*13 - 111*
2,4-Dichlorophenylacetic acid	*82*		*13 - 111*

Lab Sample ID: MB 180-494633/1-A
Matrix: Solid
Analysis Batch: 494747

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494633

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040		mg/L		04/24/25 23:47	04/28/25 10:14	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		04/24/25 23:47	04/28/25 10:14	20

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*68*		*13 - 111*	*04/24/25 23:47*	*04/28/25 10:14*	*20*
2,4-Dichlorophenylacetic acid	*66*		*13 - 111*	*04/24/25 23:47*	*04/28/25 10:14*	*20*

Lab Sample ID: LCS 180-494633/2-A
Matrix: Solid
Analysis Batch: 494747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	0.200	0.134		mg/L		67	10 - 117
Silvex (2,4,5-TP)	0.0500	0.0380		mg/L		76	10 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*68*		*13 - 111*
2,4-Dichlorophenylacetic acid	*66*		*13 - 111*

Lab Sample ID: LCSD 180-494633/3-A
Matrix: Solid
Analysis Batch: 494747

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 494633

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	0.200	0.145		mg/L		72	10 - 117	8	40
Silvex (2,4,5-TP)	0.0500	0.0377		mg/L		75	10 - 125	1	37

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 180-494633/3-A
Matrix: Solid
Analysis Batch: 494747

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 494633

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*69*		*13 - 111*
2,4-Dichlorophenylacetic acid	*68*		*13 - 111*

Lab Sample ID: LB1 180-494447/1-D
Matrix: Solid
Analysis Batch: 494747

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 494633

Analyte	LB1 Result	LB1 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040		mg/L		04/24/25 23:47	04/28/25 11:34	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		04/24/25 23:47	04/28/25 11:34	20

Surrogate	*LB1 %Recovery*	*LB1 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*65*		*13 - 111*	*04/24/25 23:47*	*04/28/25 11:34*	*20*
2,4-Dichlorophenylacetic acid	*62*		*13 - 111*	*04/24/25 23:47*	*04/28/25 11:34*	*20*

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-494667/6
Matrix: Solid
Analysis Batch: 494667

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			04/25/25 11:50	1
Nitrate as N	ND		0.10		mg/L			04/25/25 11:50	1

Lab Sample ID: LCS 180-494667/7
Matrix: Solid
Analysis Batch: 494667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	48.2		mg/L		96	80 - 120
Nitrate as N	2.50	2.41		mg/L		96	80 - 120

Lab Sample ID: 180-189543-I-1 MS
Matrix: Solid
Analysis Batch: 494667

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30		50.0	78.5		mg/L		97	80 - 120
Nitrate as N	0.17		2.50	2.59		mg/L		97	80 - 120

Lab Sample ID: 180-189543-I-1 MSD
Matrix: Solid
Analysis Batch: 494667

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	30		50.0	74.1		mg/L		88	80 - 120	6	15
Nitrate as N	0.17		2.50	2.37		mg/L		88	80 - 120	9	15

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LB 180-494448/1-A
Matrix: Solid
Analysis Batch: 494667

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			04/25/25 20:18	1
Nitrate as N	ND		0.10		mg/L			04/25/25 20:18	1

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 410-635340/1-A
Matrix: Solid
Analysis Batch: 635833

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635340

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0		pg/g		04/24/25 21:58	04/26/25 01:53	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*88*		*40 - 135*	*04/24/25 21:58*	*04/26/25 01:53*	*1*

Lab Sample ID: LCS 410-635340/2-A
Matrix: Solid
Analysis Batch: 635833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635340

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,3,7,8-TCDD	20.0	16.9		pg/g		85	66 - 120

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*82*		*40 - 135*

Lab Sample ID: LCSD 410-635340/3-A
Matrix: Solid
Analysis Batch: 635833

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 635340

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,3,7,8-TCDD	20.0	17.8		pg/g		89	66 - 120	5	25

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*75*		*40 - 135*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-640416/1-A
Matrix: Solid
Analysis Batch: 640716

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		20		mg/Kg		05/06/25 22:00	05/07/25 07:24	1
Sulfur	ND		50		mg/Kg		05/06/25 22:00	05/07/25 07:24	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: LCS 410-640416/2-A
Matrix: Solid
Analysis Batch: 640716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640416

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	50.0	48.9		mg/Kg		98	80 - 120
Sulfur	500	479		mg/Kg		96	89 - 110

Lab Sample ID: MB 410-635886/1-A
Matrix: Solid
Analysis Batch: 636732

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		04/28/25 06:37	04/28/25 15:47	1

Lab Sample ID: LCS 410-635886/2-A
Matrix: Solid
Analysis Batch: 636732

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	5.00	4.92		mg/L		98	83 - 119

Lab Sample ID: 180-189451-1 MS
Matrix: Solid
Analysis Batch: 636732

Client Sample ID: 250422010-08
Prep Type: TCLP
Prep Batch: 635886

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND	FL	5.00	4.34		mg/L		81	75 - 125

Lab Sample ID: 180-189432-A-1-F DU
Matrix: Solid
Analysis Batch: 636732

Client Sample ID: Duplicate
Prep Type: TCLP
Prep Batch: 635886

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	ND		ND		mg/L		NC	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-640416/1-A ^2
Matrix: Solid
Analysis Batch: 640825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.40		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Barium	ND		0.40		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Beryllium	ND		0.10		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Cadmium	ND		0.10		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Chromium	ND		0.40		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Copper	ND		0.40		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Molybdenum	ND		0.20		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Nickel	ND		0.40		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Lead	ND		0.20		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Lead	ND		0.20		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Lead	ND		0.20		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Antimony	ND		0.20		mg/Kg		05/06/25 22:00	05/07/25 11:19	2

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-640416/1-A ^2
Matrix: Solid
Analysis Batch: 640825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 640416

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.10		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Selenium	ND		0.40		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Sodium	ND		50		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Thallium	ND		0.10		mg/Kg		05/06/25 22:00	05/07/25 11:19	2
Zinc	ND		30		mg/Kg		05/06/25 22:00	05/07/25 11:19	2

Lab Sample ID: LCS 410-640416/2-A ^2
Matrix: Solid
Analysis Batch: 640825

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 640416

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	50.0	49.3		mg/Kg		99	87 - 114
Barium	50.0	50.3		mg/Kg		101	87 - 117
Beryllium	5.00	4.78		mg/Kg		96	80 - 120
Cadmium	5.00	4.90		mg/Kg		98	88 - 117
Chromium	50.0	49.3		mg/Kg		99	86 - 116
Copper	50.0	47.5		mg/Kg		95	84 - 115
Molybdenum	5.00	4.85		mg/Kg		97	86 - 119
Nickel	50.0	49.6		mg/Kg		99	87 - 115
Lead	5.00	4.76		mg/Kg		95	88 - 117
Lead	5.00	5.10		mg/Kg		102	88 - 117
Lead	5.00	5.02		mg/Kg		100	88 - 117
Antimony	10.0	9.91		mg/Kg		99	87 - 116
Silver	5.00	5.03		mg/Kg		101	88 - 117
Selenium	10.0	9.52		mg/Kg		95	87 - 115
Sodium	500	461		mg/Kg		92	81 - 120
Thallium	10.0	10.1		mg/Kg		101	87 - 116
Zinc	50.0	49.6		mg/Kg		99	86 - 116

Lab Sample ID: 410-218637-A-1-D MS ^2
Matrix: Solid
Analysis Batch: 640825

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 640416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	3.1		55.6	59.1		mg/Kg	☼	101	75 - 125
Barium	57	FH	55.6	140	FH	mg/Kg	☼	149	75 - 125
Beryllium	0.39		5.56	5.15		mg/Kg	☼	86	75 - 125
Cadmium	0.12		5.56	5.92		mg/Kg	☼	104	75 - 125
Chromium	15		55.6	77.6		mg/Kg	☼	113	75 - 125
Copper	8.4		55.6	62.7		mg/Kg	☼	98	75 - 125
Molybdenum	0.72		5.56	6.15		mg/Kg	☼	96	75 - 125
Nickel	13		55.6	64.4		mg/Kg	☼	92	75 - 125
Lead	7.7	FH F2	5.56	17.6	FH	mg/Kg	☼	177	75 - 125
Lead	7.8	FH F2	5.56	17.8	FH	mg/Kg	☼	180	75 - 125
Lead	7.9	FH F2	5.56	17.8	FH	mg/Kg	☼	179	75 - 125
Antimony	ND		11.1	8.89		mg/Kg	☼	79	75 - 125
Silver	ND		5.56	5.40		mg/Kg	☼	97	75 - 125
Selenium	ND		11.1	11.4		mg/Kg	☼	101	75 - 125
Sodium	140		556	741		mg/Kg	☼	109	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-218637-A-1-D MS ^2
Matrix: Solid
Analysis Batch: 640825

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 640416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.19		11.1	10.9		mg/Kg	☼	97	75 - 125
Zinc	36		55.6	99.5		mg/Kg	☼	115	75 - 125

Lab Sample ID: 410-218637-A-1-E MSD ^2
Matrix: Solid
Analysis Batch: 640825

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 640416

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	3.1		58.3	64.0		mg/Kg	☼	104	75 - 125	8	20
Barium	57	FH	58.3	139	FH	mg/Kg	☼	141	75 - 125	0	20
Beryllium	0.39		5.83	5.56		mg/Kg	☼	89	75 - 125	8	20
Cadmium	0.12		5.83	6.20		mg/Kg	☼	104	75 - 125	5	20
Chromium	15		58.3	60.1		mg/Kg	☼	112	75 - 125	3	20
Copper	8.4		58.3	66.9		mg/Kg	☼	100	75 - 125	7	20
Molybdenum	0.72		5.83	6.47		mg/Kg	☼	99	75 - 125	5	20
Nickel	13		58.3	69.6		mg/Kg	☼	97	75 - 125	8	20
Lead	7.7	FH F2	5.83	13.5	F2	mg/Kg	☼	98	75 - 125	26	20
Lead	7.8	FH F2	5.83	13.8	F2	mg/Kg	☼	102	75 - 125	26	20
Lead	7.9	FH F2	5.83	13.8	F2	mg/Kg	☼	102	75 - 125	25	20
Antimony	ND		11.7	10.2		mg/Kg	☼	86	75 - 125	13	20
Silver	ND		5.83	5.76		mg/Kg	☼	99	75 - 125	6	20
Selenium	ND		11.7	11.8		mg/Kg	☼	100	75 - 125	3	20
Sodium	140		583	759		mg/Kg	☼	107	75 - 125	2	20
Thallium	0.19		11.7	11.8		mg/Kg	☼	99	75 - 125	7	20
Zinc	36		58.3	95.9		mg/Kg	☼	104	75 - 125	4	20

Lab Sample ID: 410-218637-A-1-C DU ^2
Matrix: Solid
Analysis Batch: 640825

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 640416

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	3.1		3.16		mg/Kg	☼	0.4	20
Barium	57	FH	58.2		mg/Kg	☼	2	20
Beryllium	0.39		0.384		mg/Kg	☼	2	20
Cadmium	0.12		0.159	F5	mg/Kg	☼	27	20
Chromium	15		14.9		mg/Kg	☼	0.3	20
Copper	8.4		8.87		mg/Kg	☼	5	20
Molybdenum	0.72		0.831		mg/Kg	☼	14	20
Nickel	13		13.5		mg/Kg	☼	2	20
Lead	7.7	FH F2	7.79		mg/Kg	☼	0.6	20
Lead	7.8	FH F2	7.80		mg/Kg	☼	0.1	20
Lead	7.9	FH F2	7.89		mg/Kg	☼	0.2	20
Antimony	ND		ND		mg/Kg	☼	NC	20
Silver	ND		ND		mg/Kg	☼	NC	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Sodium	140		143		mg/Kg	☼	6	20
Thallium	0.19		0.183		mg/Kg	☼	5	20
Zinc	36		51.8	F5	mg/Kg	☼	37	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-635886/1-A
Matrix: Solid
Analysis Batch: 637960

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 635886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.25		mg/L		04/28/25 06:37	04/30/25 22:20	1
Arsenic	ND		0.020		mg/L		04/28/25 06:37	04/30/25 22:20	1
Barium	ND		0.020		mg/L		04/28/25 06:37	04/30/25 22:20	1
Cadmium	ND		0.0050		mg/L		04/28/25 06:37	04/30/25 22:20	1
Chromium	ND		0.020		mg/L		04/28/25 06:37	04/30/25 22:20	1
Copper	ND		0.010		mg/L		04/28/25 06:37	04/30/25 22:20	1
Molybdenum	ND		0.0050		mg/L		04/28/25 06:37	04/30/25 22:20	1
Nickel	ND		0.010		mg/L		04/28/25 06:37	04/30/25 22:20	1
Lead	ND		0.0050		mg/L		04/28/25 06:37	04/30/25 22:20	1
Antimony	ND		0.010		mg/L		04/28/25 06:37	04/30/25 22:20	1
Silver	ND		0.0050		mg/L		04/28/25 06:37	04/30/25 22:20	1
Selenium	ND		0.010		mg/L		04/28/25 06:37	04/30/25 22:20	1
Zinc	ND		0.10		mg/L		04/28/25 06:37	04/30/25 22:20	1

Lab Sample ID: LCS 410-635886/2-A
Matrix: Solid
Analysis Batch: 637960

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	50.0	48.1		mg/L		96	90 - 110
Arsenic	5.00	4.62		mg/L		92	90 - 109
Barium	5.00	4.93		mg/L		99	90 - 113
Chromium	5.00	4.75		mg/L		95	90 - 110
Copper	5.00	4.80		mg/L		96	90 - 110
Molybdenum	0.500	0.502		mg/L		100	90 - 115
Nickel	5.00	4.72		mg/L		94	90 - 109
Lead	0.500	0.475		mg/L		95	90 - 110
Antimony	1.00	0.920		mg/L		92	90 - 115
Silver	0.500	0.472		mg/L		94	90 - 112
Selenium	1.00	0.988		mg/L		99	90 - 110
Zinc	5.00	4.66		mg/L		93	90 - 112

Lab Sample ID: LCS 410-635886/2-A
Matrix: Solid
Analysis Batch: 638569

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 635886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.500	0.509		mg/L		102	90 - 112

Lab Sample ID: 180-189451-1 MS
Matrix: Solid
Analysis Batch: 637960

Client Sample ID: 250422010-08
Prep Type: TCLP
Prep Batch: 635886

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	0.44		10.0	8.75		mg/L		83	75 - 125
Arsenic	ND	FL	5.00	1.55	FL	mg/L		31	75 - 125
Barium	0.27	B	100	81.8	E	mg/L		82	75 - 125
Chromium	ND		5.00	4.09		mg/L		82	75 - 125
Copper	0.052		5.00	4.15		mg/L		82	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-189451-1 MS — **Client Sample ID: 250422010-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 637960 — **Prep Batch: 635886**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	0.0056	B	10.0	8.61		mg/L		86	81 - 125
Nickel	0.11		5.00	4.18		mg/L		81	75 - 125
Lead	ND		5.00	4.03		mg/L		81	75 - 125
Antimony	ND	FL B	5.00	1.59	FL	mg/L		32	75 - 125
Silver	ND		5.00	3.95		mg/L		79	75 - 125
Selenium	0.013	FL	1.00	0.739	FL	mg/L		73	75 - 125
Zinc	1.2		5.00	5.05		mg/L		76	75 - 125

Lab Sample ID: 180-189451-1 MS — **Client Sample ID: 250422010-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 638569 — **Prep Batch: 635886**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		1.00	0.763		mg/L		76	75 - 125

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-635887/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 637392 — **Prep Batch: 635887**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		04/28/25 07:24	04/29/25 22:01	1

Lab Sample ID: LCS 410-635887/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 637392 — **Prep Batch: 635887**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00100	0.00120	*+	mg/L		120	80 - 118

Lab Sample ID: 180-189451-1 MS — **Client Sample ID: 250422010-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 637392 — **Prep Batch: 635887**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	*+ FL	0.0200	0.0153	FL	mg/L		76	80 - 120

Lab Sample ID: 180-189432-A-1-J DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 637392 — **Prep Batch: 635887**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND	*+ FL	ND	*+	mg/L		NC	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Method: 350.1_GD - Ammonia by Gas Diffusion

Lab Sample ID: MB 180-494615/49
Matrix: Solid
Analysis Batch: 494615

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			04/24/25 12:04	1

Lab Sample ID: LCS 180-494615/53
Matrix: Solid
Analysis Batch: 494615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	0.500	0.530		mg/L		106	90 - 110

Lab Sample ID: 180-189477-D-2 MS
Matrix: Solid
Analysis Batch: 494615

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	7.1	4	0.500	7.34	4	mg/L		41	90 - 110

Lab Sample ID: 180-189477-D-2 MSD
Matrix: Solid
Analysis Batch: 494615

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia, distilled	7.1	4	0.500	7.25	4	mg/L		24	90 - 110	1	20

Lab Sample ID: LB 180-494448/1-A
Matrix: Solid
Analysis Batch: 494615

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			04/24/25 13:08	1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-638138/1-A
Matrix: Solid
Analysis Batch: 638758

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 638138

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		90		mg/Kg		05/01/25 08:58	05/02/25 00:21	1

Lab Sample ID: LCS 410-638138/25-A
Matrix: Solid
Analysis Batch: 638758

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 638138

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	20.4	J	mg/Kg		2	0 - 5.14

Method: 9012 - Cyanide, Reactive (Continued)

Lab Sample ID: 180-189691-C-1-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 638758 — **Prep Batch: 638138**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	ND		1000	ND		mg/Kg		0	0 - 44

Lab Sample ID: 180-189691-C-1-I MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 638758 — **Prep Batch: 638138**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Reactive	ND		1000	ND		mg/Kg		0	0 - 44	NC	11

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-638138/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 638254 — **Prep Batch: 638138**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160		mg/Kg		05/01/25 08:58	05/01/25 11:46	1

Lab Sample ID: LCS 410-638138/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 638254 — **Prep Batch: 638138**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	370		mg/Kg		69	62 - 104

Lab Sample ID: 180-189691-C-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 638254 — **Prep Batch: 638138**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	ND	FL	538	ND	FL	mg/Kg		0	62 - 104

Lab Sample ID: 180-189691-C-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 638254 — **Prep Batch: 638138**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide, Reactive	ND	FL	538	224	FL	mg/Kg		42	82 - 104	NC	21

Method: EPA 1020B - Ignitability, Small Scale Closed-Cup Method

Lab Sample ID: 180-189480-L-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494518

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ignitability	>140		>140		Degrees F		NC	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Method: EPA 1664B - HEM and SGT-HEM

Lab Sample ID: MB 180-494540/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494591 — **Prep Batch: 494540**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		04/24/25 07:17	04/24/25 11:03	1

Lab Sample ID: LCS 180-494540/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494591 — **Prep Batch: 494540**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.1	33.3		mg/L		83	78 - 114

Lab Sample ID: LCSD 180-494540/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494591 — **Prep Batch: 494540**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.1	35.3		mg/L		88	78 - 114	6	18

Lab Sample ID: 180-189477-B-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494591 — **Prep Batch: 494540**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	ND	FL	41.8	25.5	FL	mg/L		50	78 - 114

Lab Sample ID: LB 180-494448/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 494591 — **Prep Batch: 494540**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		4.8		mg/L		04/24/25 07:17	04/24/25 11:03	1

Method: EPA 410.4 - COD

Lab Sample ID: MB 180-494694/12-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494780 — **Prep Batch: 494694**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		04/25/25 11:52	04/25/25 15:58	1

Lab Sample ID: MB 180-494694/36-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494780 — **Prep Batch: 494694**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		04/25/25 11:52	04/25/25 16:16	1

Method: EPA 410.4 - COD (Continued)

Lab Sample ID: LCS 180-494694/35-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494780 — **Prep Batch: 494694**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	75.0	76.0		mg/L		101	90 - 110

Lab Sample ID: LB 180-494448/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 494780 — **Prep Batch: 494694**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10		mg/L		04/25/25 11:52	04/25/25 16:27	1

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-494486/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494507 — **Prep Batch: 494486**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50		mg/Kg		04/23/25 11:29	04/23/25 13:35	1

Lab Sample ID: HLCS 180-494486/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494507 — **Prep Batch: 494486**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.257		mg/Kg		103	90 - 110

Lab Sample ID: LCS 180-494486/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494507 — **Prep Batch: 494486**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	26.0	23.4		mg/Kg		90	17 - 163

Lab Sample ID: LLCS 180-494486/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494507 — **Prep Batch: 494486**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0506		mg/Kg		101	90 - 110

Lab Sample ID: 180-189334-P-2-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494507 — **Prep Batch: 494486**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND		5.35	4.85		mg/Kg	☼	91	75 - 125

Method: EPA 9014 - Cyanide (Continued)

Lab Sample ID: 180-189334-P-2-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494507 — **Prep Batch: 494486**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		5.64	5.05		mg/Kg	☼	90	75 - 125	4	20

Lab Sample ID: MB 180-495279/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495290 — **Prep Batch: 495279**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		05/06/25 14:09	05/06/25 16:03	1

Lab Sample ID: HLCS 180-495279/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495290 — **Prep Batch: 495279**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	250	251		ug/L		100	90 - 110

Lab Sample ID: LCS 180-495279/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495290 — **Prep Batch: 495279**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	197		ug/L		98	85 - 115

Lab Sample ID: LLCS 180-495279/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495290 — **Prep Batch: 495279**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	50.0	50.4		ug/L		101	90 - 110

Lab Sample ID: LB 180-495112/1-D — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 495290 — **Prep Batch: 495279**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		05/06/25 14:09	05/06/25 16:18	1

Lab Sample ID: 180-189498-H-2-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 495290 — **Prep Batch: 495279**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND		200	211		ug/L		105	75 - 125

Lab Sample ID: 180-189498-H-2-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 495290 — **Prep Batch: 495279**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		200	211		ug/L		105	75 - 125	0	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Method: EPA 9014 - Cyanide

Lab Sample ID: 180-189498-H-2-C DU
Matrix: Solid
Analysis Batch: 495290

Client Sample ID: Duplicate
Prep Type: ASTM Leach
Prep Batch: 495279

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	ND		ND		ug/L		NC	20

Method: EPA 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 180-494451/2-A
Matrix: Solid
Analysis Batch: 494464

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 494451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		30		mg/Kg		04/23/25 08:13	04/23/25 10:20	1

Lab Sample ID: LCS 180-494451/1-A
Matrix: Solid
Analysis Batch: 494464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 494451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	165	163		mg/Kg		99	85 - 115

Lab Sample ID: 180-189451-1 MS
Matrix: Solid
Analysis Batch: 494464

Client Sample ID: 250422010-08
Prep Type: Total/NA
Prep Batch: 494451

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	210		496	586		mg/Kg	☼	76	75 - 125

Lab Sample ID: 180-189451-1 MSD
Matrix: Solid
Analysis Batch: 494464

Client Sample ID: 250422010-08
Prep Type: Total/NA
Prep Batch: 494451

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	210		497	598		mg/Kg	☼	78	75 - 125	2	20

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-494610/47
Matrix: Solid
Analysis Batch: 494610

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

Lab Sample ID: LB 180-494448/1-A
Matrix: Solid
Analysis Batch: 494610

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.8		0.1		SU			04/24/25 15:35	1
Temperature	25.3		0.1		Degrees C			04/24/25 15:35	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Method: EPA 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 180-494549/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494611 — **Prep Batch: 494549**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.20		mg/Kg		04/24/25 07:52	04/24/25 12:20	1

Lab Sample ID: LCS 180-494549/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494611 — **Prep Batch: 494549**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	4.00	3.98		mg/Kg		100	90 - 110

Lab Sample ID: 180-189517-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494611 — **Prep Batch: 494549**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	ND		5.06	4.75		mg/Kg	☼	94	90 - 110

Lab Sample ID: 180-189517-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494611 — **Prep Batch: 494549**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenolics, Total Recoverable	ND		4.97	4.74		mg/Kg	☼	95	90 - 110	0	20

Method: EPA 9071B - HEM and SGT-HEM

Lab Sample ID: MB 180-494433/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494593 — **Prep Batch: 494433**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		170		mg/Kg		04/23/25 05:48	04/24/25 11:14	1

Lab Sample ID: LCS 180-494433/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494593 — **Prep Batch: 494433**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM	1330	1060		mg/Kg		79	78 - 114

Lab Sample ID: 180-189451-3 MS — **Client Sample ID: 250422010-10**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494593 — **Prep Batch: 494433**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM	10000	FH	3770	13900		mg/Kg	☼	91	78 - 114

Method: EPA 9071B - HEM and SGT-HEM (Continued)

Lab Sample ID: 180-189451-3 MSD — **Client Sample ID: 250422010-10**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494593 — **Prep Batch: 494433**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM	10000	FH	3770	16500	FH	mg/Kg	☼	161	78 - 114	17	18

Method: EPA 9095B - Paint Filter

Lab Sample ID: 180-189691-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494900

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Free Liquid	CNF		CNF		NONE		NC	20

Method: SM 2540B - Total Solids

Lab Sample ID: MB 180-494932/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494932

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			05/01/25 12:50	1

Lab Sample ID: LCS 180-494932/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494932

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Solids	459	408		mg/L		89	85 - 115

Lab Sample ID: LCSD 180-494932/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 494932

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Solids	459	392		mg/L		85	85 - 115	4	20

Lab Sample ID: LB 180-494448/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 494932

Analyte	LB Reault	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			05/01/25 12:50	1

Method: SM 2540E - Solids, Volatile and Fixed (VS)

Lab Sample ID: MB 180-495022/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 495022

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			05/01/25 12:50	1

Method: SM 2540E - Solids, Volatile and Fixed (VS) (Continued)

Lab Sample ID: LB 180-494448/1-A
Matrix: Solid
Analysis Batch: 495022

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			05/01/25 12:50	1

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-189451-1 DU
Matrix: Solid
Analysis Batch: 494513

Client Sample ID: 250422010-08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	34			33.3		%				0.6	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

GC/MS VOA

Leach Batch: 634169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-218379-U-1-A MS	Matrix Spike	TCLP	Solid	1311	

Prep Batch: 635738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-4 - RADL	250422010-11	Total/NA	Solid	5030C	
180-189451-4 - DL	250422010-11	Total/NA	Solid	5030C	

Prep Batch: 635897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-4	250422010-11	Total/NA	Solid	5030C	

Analysis Batch: 636474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-4	250422010-11	Total/NA	Solid	8260D	635897
MB 410-636474/9	Method Blank	Total/NA	Solid	8260D	
LCS 410-636474/5	Lab Control Sample	Total/NA	Solid	8260D	
LCS 410-636474/7	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-636474/6	Lab Control Sample Dup	Total/NA	Solid	8260D	
LCSD 410-636474/8	Lab Control Sample Dup	Total/NA	Solid	8260D	

Leach Batch: 636978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	1311	

Analysis Batch: 637860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-4 - DL	250422010-11	Total/NA	Solid	8260D	635736
MB 410-637860/8	Method Blank	Total/NA	Solid	8260D	
LCS 410-637860/7	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-637860/9	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 639726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-4 - RADL	250422010-11	Total/NA	Solid	8260D	635738
MB 410-639726/8	Method Blank	Total/NA	Solid	8260D	
LCS 410-639726/10	Lab Control Sample	Total/NA	Solid	8260D	
LCS 410-639726/7	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-639726/11	Lab Control Sample Dup	Total/NA	Solid	8260D	
LCSD 410-639726/9	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 641204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	8260D	636978
MB 410-641204/7	Method Blank	Total/NA	Solid	8260D	
LCS 410-641204/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-641204/5	Lab Control Sample Dup	Total/NA	Solid	8260D	
410-218379-U-1-A MS	Matrix Spike	TCLP	Solid	8260D	634169

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

GC/MS Semi VOA

Leach Batch: 494447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	EPA 1311	

Prep Batch: 494607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	3541	
MB 180-494607/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-494607/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-189559-A-1-D MS	Matrix Spike	Total/NA	Solid	3541	
180-189559-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Prep Batch: 494632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	3510C	494447
MB 180-494632/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-494632/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-494632/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 494649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	EPA 8270E	494632
180-189451-1	250422010-08	Total/NA	Solid	EPA 8270E	494607
MB 180-494607/1-A	Method Blank	Total/NA	Solid	EPA 8270E	494607
MB 180-494632/1-A	Method Blank	Total/NA	Solid	EPA 8270E	494632
LCS 180-494607/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	494607
LCS 180-494632/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	494632
LCSD 180-494632/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	494632
180-189559-A-1-D MS	Matrix Spike	Total/NA	Solid	EPA 8270E	494607
180-189559-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8270E	494807

GC Semi VOA

Prep Batch: 494434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	3541	
MB 180-494434/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-494434/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-189451-1 MS	250422010-08	Total/NA	Solid	3541	
180-189451-1 MSD	250422010-08	Total/NA	Solid	3541	

Prep Batch: 494436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-2	250422010-09	Total/NA	Solid	3541	
MB 180-494436/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-494436/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-189424-O-1-B MS	Matrix Spike	Total/NA	Solid	3541	
180-189424-O-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Prep Batch: 494442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	8151A	
MB 180-494442/1-A	Method Blank	Total/NA	Solid	8151A	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

GC Semi VOA (Continued)

Prep Batch: 494442 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-494442/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-494442/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Leach Batch: 494447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	EPA 1311	
LB1 180-494447/1-D	Method Blank	TCLP	Solid	EPA 1311	

Analysis Batch: 494455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	EPA 8081B	494434
MB 180-494434/1-A	Method Blank	Total/NA	Solid	EPA 8081B	494434
LCS 180-494434/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	494434
180-189451-1 MS	250422010-08	Total/NA	Solid	EPA 8081B	494434
180-189451-1 MSD	250422010-08	Total/NA	Solid	EPA 8081B	494434

Analysis Batch: 494463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-2	250422010-09	Total/NA	Solid	EPA 8082A	494436
MB 180-494436/1-A	Method Blank	Total/NA	Solid	EPA 8082A	494436
LCS 180-494436/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	494436
180-189424-O-1-B MS	Matrix Spike	Total/NA	Solid	EPA 8082A	494436
180-189424-O-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	494436

Prep Batch: 494631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	3510C	494447
MB 180-494631/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-494631/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-494631/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Prep Batch: 494633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	8151A	494447
LB1 180-494447/1-D	Method Blank	TCLP	Solid	8151A	494447
MB 180-494633/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-494633/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-494633/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Analysis Batch: 494646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	EPA 8151A	494442
MB 180-494442/1-A	Method Blank	Total/NA	Solid	EPA 8151A	494442
LCS 180-494442/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	494442
LCSD 180-494442/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	494442

Analysis Batch: 494661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	EPA 8081B	494631
MB 180-494631/1-A	Method Blank	Total/NA	Solid	EPA 8081B	494631
LCS 180-494631/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	494631

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

GC Semi VOA (Continued)

Analysis Batch: 494661 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 180-494631/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	494631

Analysis Batch: 494747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	EPA 8151A	494633
LB1 180-494447/1-D	Method Blank	TCLP	Solid	EPA 8151A	494633
MB 180-494633/1-A	Method Blank	Total/NA	Solid	EPA 8151A	494633
LCS 180-494633/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	494633
LCSD 180-494633/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	494633

HPLC/IC

Leach Batch: 494448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	D3987-85	
LB 180-494448/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 494667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	EPA 9056A	494448
LB 180-494448/1-A	Method Blank	ASTM Leach	Solid	EPA 9056A	494448
MB 180-494667/6	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-494667/7	Lab Control Sample	Total/NA	Solid	EPA 9056A	
180-189543-I-1 MS	Matrix Spike	Total/NA	Solid	EPA 9056A	
180-189543-I-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9056A	

Specialty Organics

Prep Batch: 635340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-2	250422010-09	Total/NA	Solid	HRMS-Soxtherm	
MB 410-635340/1-A	Method Blank	Total/NA	Solid	HRMS-Soxtherm	
LCS 410-635340/2-A	Lab Control Sample	Total/NA	Solid	HRMS-Soxtherm	
LCSD 410-635340/3-A	Lab Control Sample Dup	Total/NA	Solid	HRMS-Soxtherm	

Analysis Batch: 635833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-2	250422010-09	Total/NA	Solid	8290A	635340
MB 410-635340/1-A	Method Blank	Total/NA	Solid	8290A	635340
LCS 410-635340/2-A	Lab Control Sample	Total/NA	Solid	8290A	635340
LCSD 410-635340/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	635340

Metals

Leach Batch: 634848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189432-A-1-F DU	Duplicate	TCLP	Solid	EPA 1311	
180-189432-A-1-J DU	Duplicate	TCLP	Solid	EPA 1311	

Leach Batch: 635087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	1311	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Metals (Continued)

Leach Batch: 635087 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1 MS	250422010-08	TCLP	Solid	1311	

Prep Batch: 635886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	3005A	635087
MB 410-635886/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 410-635886/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
180-189451-1 MS	250422010-08	TCLP	Solid	3005A	635087
180-189432-A-1-F DU	Duplicate	TCLP	Solid	3005A	634848

Prep Batch: 635887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	7470A	635087
MB 410-635887/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 410-635887/2-A	Lab Control Sample	Total/NA	Solid	7470A	
180-189451-1 MS	250422010-08	TCLP	Solid	7470A	635087
180-189432-A-1-J DU	Duplicate	TCLP	Solid	7470A	634848

Analysis Batch: 636732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	6010D	635886
MB 410-635886/1-A	Method Blank	Total Recoverable	Solid	6010D	635886
LCS 410-635886/2-A	Lab Control Sample	Total Recoverable	Solid	6010D	635886
180-189451-1 MS	250422010-08	TCLP	Solid	6010D	635886
180-189432-A-1-F DU	Duplicate	TCLP	Solid	6010D	635886

Analysis Batch: 637392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	7470A	635887
MB 410-635887/1-A	Method Blank	Total/NA	Solid	7470A	635887
LCS 410-635867/2-A	Lab Control Sample	Total/NA	Solid	7470A	635887
180-189451-1 MS	250422010-08	TCLP	Solid	7470A	635887
180-189432-A-1-J DU	Duplicate	TCLP	Solid	7470A	635887

Analysis Batch: 637960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	6020B	635886
MB 410-635886/1-A	Method Blank	Total Recoverable	Solid	6020B	835886
LCS 410-635866/2-A	Lab Control Sample	Total Recoverable	Solid	6020B	635886
180-189451-1 MS	250422010-08	TCLP	Solid	6020B	635886

Analysis Batch: 638569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	TCLP	Solid	6020B	635886
LCS 410-635886/2-A	Lab Control Sample	Total Recoverable	Solid	6020B	635886
180-189451-1 MS	250422010-08	TCLP	Solid	6020B	635888

Prep Batch: 640416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	3050B	
MB 410-640416/1-A	Method Blank	Total/NA	Solid	3050B	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

Metals (Continued)

Prep Batch: 640416 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-640416/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-640416/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 410-640416/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
410-218637-A-1-D MS ^2	Matrix Spike	Total/NA	Solid	3050B	
410-218637-A-1-E MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-218637-A-1-C DU ^2	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 640716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	6010D	640416
MB 410-640416/1-A	Method Blank	Total/NA	Solid	6010D	640416
LCS 410-640416/2-A	Lab Control Sample	Total/NA	Solid	6010D	640416

Analysis Batch: 640825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	6020B	640416
MB 410-640416/1-A ^2	Method Blank	Total/NA	Solid	6020B	640416
LCS 410-640416/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	640416
410-218637-A-1-D MS ^2	Matrix Spike	Total/NA	Solid	6020B	640416
410-218637-A-1-E MSD ^2	Matrix Spike Duplicate	Total/NA	Solid	6020B	640416
410-218637-A-1-C DU ^2	Duplicate	Total/NA	Solid	6020B	640416

General Chemistry

Prep Batch: 494433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-3	250422010-10	Total/NA	Solid	9071B	
MB 180-494433/1-A	Method Blank	Total/NA	Solid	9071B	
LCS 180-494433/2-A	Lab Control Sample	Total/NA	Solid	9071B	
180-189451-3 MS	250422010-10	Total/NA	Solid	9071B	
180-189451-3 MSD	250422010-10	Total/NA	Solid	9071B	

Leach Batch: 494448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	D3987-85	
180-189451-3	250422010-10	ASTM Leach	Solid	D3987-85	
LB 180-494448/1-A	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-494448/1-B	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-494448/1-C	Method Blank	ASTM Leach	Solid	D3987-85	

Prep Batch: 494451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	9030B	
MB 180-494451/2-A	Method Blank	Total/NA	Solid	9030B	
LCS 180-494451/1-A	Lab Control Sample	Total/NA	Solid	9030B	
180-189451-1 MS	250422010-08	Total/NA	Solid	9030B	
180-189451-1 MSD	250422010-08	Total/NA	Solid	9030B	

Analysis Batch: 494464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	EPA 9034	494451

General Chemistry (Continued)

Analysis Batch: 494464 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-494451/2-A	Method Blank	Total/NA	Solid	EPA 9034	494451
LCS 180-494451/1-A	Lab Control Sample	Total/NA	Solid	EPA 9034	494451
180-189451-1 MS	250422010-08	Total/NA	Solid	EPA 9034	494451
180-189451-1 MSD	250422010-08	Total/NA	Solid	EPA 9034	494451

Prep Batch: 494486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	9010C	
MB 180-494488/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-494486/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-494486/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-494486/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-189334-P-2-E MS	Matrix Spike	Total/NA	Solid	9010C	
180-189334-P-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	9010C	

Analysis Batch: 494507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	EPA 9014	494486
MB 180-494488/4-A	Method Blank	Total/NA	Solid	EPA 9014	494486
HLCS 180-494486/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	494486
LCS 180-494486/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	494486
LLCS 180-494486/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	494486
180-189334-P-2-E MS	Matrix Spike	Total/NA	Solid	EPA 9014	494486
180-189334-P-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9014	494486

Analysis Batch: 494513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	SM 2540G	
180-189451-2	250422010-09	Total/NA	Solid	SM 2540G	
180-189451-3	250422010-10	Total/NA	Solid	SM 2540G	
180-189451-4	250422010-11	Total/NA	Solid	SM 2540G	
180-189451-1 DU	250422010-08	Total/NA	Solid	SM 2540G	

Analysis Batch: 494518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	EPA 1020B	
180-189480-L-1 DU	Duplicate	Total/NA	Solid	EPA 1020B	

Prep Batch: 494540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-3	250422010-10	ASTM Leach	Solid	1664B	494448
LB 180-494448/1-B	Method Blank	ASTM Leach	Solid	1664B	494448
MB 180-494540/1-A	Method Blank	Total/NA	Solid	1664B	
LCS 180-494540/2-A	Lab Control Sample	Total/NA	Solid	1664B	
LCSD 180-494540/3-A	Lab Control Sample Dup	Total/NA	Solid	1664B	
180-189477-B-1-A MS	Matrix Spike	Total/NA	Solid	1664B	

Prep Batch: 494549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-2	250422010-09	Total/NA	Solid	Distill/Phenol	
MB 180-494549/1-A	Method Blank	Total/NA	Solid	Distill/Phenol	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

General Chemistry (Continued)

Prep Batch: 494549 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-494549/2-A	Lab Control Sample	Total/NA	Solid	Distill/Phenol	
180-189517-A-1-B MS	Matrix Spike	Total/NA	Solid	Distill/Phenol	
180-189517-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	Distill/Phenol	

Analysis Batch: 494591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-3	250422010-10	ASTM Leach	Solid	EPA 1664B	494540
LB 180-494448/1-B	Method Blank	ASTM Leach	Solid	EPA 1664B	494540
MB 180-494540/1-A	Method Blank	Total/NA	Solid	EPA 1664B	494540
LCS 180-494540/2-A	Lab Control Sample	Total/NA	Solid	EPA 1664B	494540
LCSD 180-494540/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 1664B	494540
180-189477-B-1-A MS	Matrix Spike	Total/NA	Solid	EPA 1664B	494540

Analysis Batch: 494593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-3	250422010-10	Total/NA	Solid	EPA 9071B	494433
MB 180-494433/1-A	Method Blank	Total/NA	Solid	EPA 9071B	494433
LCS 180-494433/2-A	Lab Control Sample	Total/NA	Solid	EPA 9071B	494433
180-189451-3 MS	250422010-10	Total/NA	Solid	EPA 9071B	494433
180-189451-3 MSD	250422010-10	Total/NA	Solid	EPA 9071B	494433

Analysis Batch: 494610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	EPA 9040C	494448
LB 180-494448/1-A	Method Blank	ASTM Leach	Solid	EPA 9040C	494448
LCS 180-494610/47	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 494611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-2	250422010-09	Total/NA	Solid	EPA 9065	494549
MB 180-494549/1-A	Method Blank	Total/NA	Solid	EPA 9065	494549
LCS 180-494549/2-A	Lab Control Sample	Total/NA	Solid	EPA 9065	494549
180-189517-A-1-B MS	Matrix Spike	Total/NA	Solid	EPA 9065	494549
180-189517-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9065	494549

Analysis Batch: 494615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	350.1_GD	494448
LB 180-494448/1-A	Method Blank	ASTM Leach	Solid	350.1_GD	494448
MB 180-494615/49	Method Blank	Total/NA	Solid	350.1_GD	
LCS 180-494615/53	Lab Control Sample	Total/NA	Solid	350.1_GD	
180-189477-D-2 MS	Matrix Spike	Total/NA	Solid	350.1_GD	
180-189477-D-2 MSD	Matrix Spike Duplicate	Total/NA	Solid	350.1_GD	

Prep Batch: 494694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	410.4	494448
LB 180-494448/1-C	Method Blank	ASTM Leach	Solid	410.4	494448
MB 180-494694/12-A	Method Blank	Total/NA	Solid	410.4	
MB 180-494694/36-A	Method Blank	Total/NA	Solid	410.4	
LCS 180-494694/35-A	Lab Control Sample	Total/NA	Solid	410.4	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

General Chemistry

Analysis Batch: 494780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	EPA 410.4	494694
LB 180-494448/1-C	Method Blank	ASTM Leach	Solid	EPA 410.4	494694
MB 180-494694/12-A	Method Blank	Total/NA	Solid	EPA 410.4	494694
MB 180-494694/36-A	Method Blank	Total/NA	Solid	EPA 410.4	494694
LCS 180-494694/35-A	Lab Control Sample	Total/NA	Solid	EPA 410.4	494694

Analysis Batch: 494900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	EPA 9095B	
180-189691-A-1 DU	Duplicate	Total/NA	Solid	EPA 9095B	

Analysis Batch: 494932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	SM 2540B	494448
LB 180-494448/1-A	Method Blank	ASTM Leach	Solid	SM 2540B	494448
MB 180-494932/1	Method Blank	Total/NA	Solid	SM 2540B	
LCS 180-494932/2	Lab Control Sample	Total/NA	Solid	SM 2540B	
LCSD 180-494932/3	Lab Control Sample Dup	Total/NA	Solid	SM 2540B	

Analysis Batch: 495022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	SM 2540E	494448
LB 180-494448/1-A	Method Blank	ASTM Leach	Solid	SM 2540E	494448
MB 180-495022/1	Method Blank	Total/NA	Solid	SM 2540E	

Leach Batch: 495112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-495112/1-D	Method Blank	ASTM Leach	Solid	D3987-85	
180-189498-H-2-D MS	Matrix Spike	ASTM Leach	Solid	D3987-85	
180-189498-H-2-E MSD	Matrix Spike Duplicate	ASTM Leach	Solid	D3987-85	
180-189498-H-2-C DU	Duplicate	ASTM Leach	Solid	D3987-85	

Prep Batch: 495279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	9010C	494448
LB 180-495112/1-D	Method Blank	ASTM Leach	Solid	9010C	495112
MB 180-495279/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-495279/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-495279/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-495279/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-189498-H-2-D MS	Matrix Spike	ASTM Leach	Solid	9010C	495112
180-189498-H-2-E MSD	Matrix Spike Duplicate	ASTM Leach	Solid	9010C	495112
180-189498-H-2-C DU	Duplicate	ASTM Leach	Solid	9010C	495112

Analysis Batch: 495290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	ASTM Leach	Solid	EPA 9014	495279
LB 180-495112/1-D	Method Blank	ASTM Leach	Solid	EPA 9014	495279
MB 180-495279/4-A	Method Blank	Total/NA	Solid	EPA 9014	495279
HLCS 180-495279/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	495279
LCS 180-495279/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	495279

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-189451-1
SDG: 250422010

General Chemistry (Continued)

Analysis Batch: 495290 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 180-495279/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	495279
180-189498-H-2-D MS	Matrix Spike	ASTM Leach	Solid	EPA 9014	495279
180-189498-H-2-E MSD	Matrix Spike Duplicate	ASTM Leach	Solid	EPA 9014	495279
180-189498-H-2-C DU	Duplicate	ASTM Leach	Solid	EPA 9014	495279

Prep Batch: 638138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	7.3.4	
MB 410-638138/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-638138/25-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-638138/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
180-189691-C-1-E MS	Matrix Spike	Total/NA	Solid	7.3.4	
180-189691-C-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.4	
180-189691-C-1-H MS	Matrix Spike	Total/NA	Solid	7.3.4	
180-189691-C-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.4	

Analysis Batch: 638254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-189451-1	250422010-08	Total/NA	Solid	9034	638138
MB 410-638138/1-A	Method Blank	Total/NA	Solid	9034	638138
LCS 410-638138/2-A	Lab Control Sample	Total/NA	Solid	9034	638138
180-189691-C-1-E MS	Matrix Spike	Total/NA	Solid	9034	638138
160-189691-C-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	9034	638138

Analysis Batch: 638758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-169451-1	250422010-08	Total/NA	Solid	9012	638138
MB 410-638138/1-A	Method Blank	Total/NA	Solid	9012	638138
LCS 410-638138/25-A	Lab Control Sample	Total/NA	Solid	9012	638138
180-189691-C-1-H MS	Matrix Spike	Total/NA	Solid	9012	638138
180-189691-C-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	9012	638138

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250422010**

Additional Information : Quarterly Limed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	See attached Parameter List	See attached Parameter List	HEM, ASTM HEM, %total solids	VOA EPA 8260D *	Total Solids	Total Sulfide **(2N zinc acetate 8mls)
							Number of Containers					
250422010-08	4/21/25	1045	S	N	C	Always maintain sample/extract at	9					1
250422010-09	4/21/25	1045	S	N	G	25°C when reading any pH result.		1				
250422010-10	4/21/25	1045	S	N	G	Solids must be analyzed by 2540G.			1			
250422010-11	4/21/25	1045	S	N*	G	All methods must be accredited by				1	1	
						PADEP or NELAC.						
						Email a copy of LIMS login with signed						
						COC as soon as possible after receipt.						
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-189451 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	ALCOSAN	4-22-25	1420	[illegible]	EUROFINS PGH	4-22-25	1420
[illegible]	EPITUE	4-22-25	15:05	[illegible]	EPITUE	4/22/25	1505
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: TH Date: 4/22/25

Supervisor Review: Initials: [illegible] Date: 4-22-25

VOA Solid Matrix Prep Log (SW846-8260)

Sample Name	LIMS ID	Vial #	Chemical Type (MEOH/Sodium Bisulfite)	Control No	Sample Weight (grams)	Date Prepared	Prep/Collection Analyst Initials:
Scum Grab	250220015-01 Volatile Organics 2/20/2025 8:36:00 AM	835	NaHSO3	[illegible]	[illegible]		
		[illegible]					
		[illegible]					
ASH grab	250415010-11 8260B VOA 4/15/2025 5:20:00 AM	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]			[illegible]		
		[illegible]			[illegible]		
	250415010-11 Solids, Total 4/15/2025 5:20:00 AM	841			[illegible]		
		842					
Grit Grab	250415011-11 8260B VOA 4/15/2025 5:27:00 AM	843	NaHSO3	930205	1.1		
		844			1.2		
	250415011-11 Solids, Total 4/15/2025 5:27:00 AM	845					
Scum Grab	250415012-11 8260B VOA 4/15/2025 5:34:00 AM	846	NaHSO3	930205	1.0		
		847			1.1		
	250415012-11 Solids, Total 4/15/2025 5:34:00 AM	848					
Lime CAKE	250422010-11 8260B VOA 4/21/2025 10:45:00 AM	849	NAHSO3	930205	1.1	4-22-25	TAKAC
		850			1.2		
	250422010-11 Solids, Total 4/21/2025 10:45:00 AM	851					

Contract Lab ONLY Quarterly Analysis, includes **Unlimed Sludge** (one quarter per year)

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM , LIMED SLUDGE & UNLIMED SLUDGE- ONE QUARTER PER YEAR (all sent to outside lab)			
COMPOSITE (2 Clear Quarts + 4 Amber half pints + 2 pints)			
7 days of a Grab sample to generate a Composite* (minimum 5 grabs) Each sample matrix is analyzed for all parameters listed. ---------- NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlimed sludge is included, analyses are performed by contract laboratory(s) only- **see Residuals for which quarter.** **Check reporting limit requirments.**	Quarterly	ASTM EXTRACTION (LIQUID) pH(SW-846 9040C) pH Temp(SW-846 9040C) Total Solids Total Volatile Solids Nitrate-Nitrogen Cyanide, Total COD NH3-N Total Sulfates TCLP EXTRACTION (LIQUID) TCLP METALS: Aluminum Arsenic Barium Cadmium Chromium Lead Mercury Selenium Antimony Boron Copper Molybdenum Nickel Zinc Silver Herbicides Pesticides Chloradane Toxaphene 8270 BNA 8260 Volatile Organics (ZHE) MISCELLANEOUS (SOLID) Herbicides Pesticides Heptachlor/Hep. Epoxide Chlordane Toxaphene Cyanide, Total (comp not grab) Total Sulfide (comp not grab) (1) Paint Filter Test Ignitability 8270 BNA (1) 2N zinc acetate 8mls Arsenic Barium Cadmium Chromium Lead [redacted] Selenium Silver Antimony Beryllium Molybdenum Nickel Zinc Boron Total Sulfur (SW846 6010) Copper Thallium Sodium Total Solids (SM2540G) [redacted]#	Laboratory
		COMPOSITE (Half Pint) Lancaster Lab Reactive Cyanide (wet and dry Reactive Sulfide (wet and dry)	
		AMBER GRAB (1 Amber quart) PCBs * Phenolics * 2,3,7,8-TCDD* Solids, Total (SM2540G)*	
		HEM GRAB (1 clear pint) Oil & Grease * Solids, Total (SM2540G)* ASTM Oil & Grease *	
		VOA GRAB (1 vial + 1 jar for TS) 8260 Volatile Organics * Solids, Total (SM2540G)*	
		# Not logged in separately from Solids, Total * Analyses done on a separate grab sample for each matrix.	

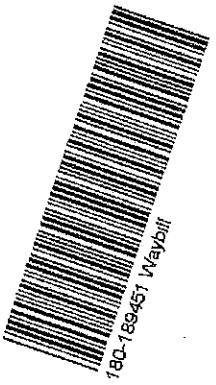
Red indicates analyses performed by a contract laboratory

SEND 2 FULL CLEAR QUARTS + 4 AMBER 1/2 PINTS + 2 PINTS + ONE HALF PINT OF COMPOSITE, 1 CLEAR PINT GRAB FOR HEM, 1 AMBER QUART GRAB FOR EACH LOCATION, AND 1 VOA VIAL GRAB WITH 1 JAR FOR TS)

Alcosan #25 -0.4

J8 2.4 → 2.0

J9 3.7 → 3.3



Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-537327.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-189451-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 5/5/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D/1311_Z TCLP Volatiles + Naphthalene	6020B/1311T_M (MOD) TCLP Quarterly Metals List	7470A/1311T_Hg Mercury	6010D/1311T_M (MOD) TCLP Boron	6010D/3050B Sulfur and Boron	6020D/3050B Quarterly Custom Total Metals	9012_ReactiveCN/7.3.3	9034_Reactive/7.3.4	8290A/HRMS_Soxthm_P 2,3,7,8-TCDD	8260D/5030C_H Alcohol Volatile List	8260D/5030C_Solid_NAC Alcohol Volatile List			Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
250422010-08 (180-189451-1)	4/21/25	10:45 Eastern	G	Solid			X	X	X	X	X	X	X	X						3	, DO NOT Overdilute; low limits required
250422010-09 (180-189451-2)	4/21/25	10:45 Eastern	G	Solid											X					1	
250422010-11 (180-189451-4)	4/21/25	10:45 Eastern	G	Solid												X	X			3	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 4/23/25 1330	Company: ETE	Received by: Clarence Williams	Date/Time: 4/23/25 1330	Company: ETE
Relinquished by: Clarence Williams	Date/Time: 4/23/25 1905	Company: ETE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 4/23/25 1905	Company: ETE

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R. 3.1 C.S. 0

Ver: 10/10/2024

5/12/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-189451-1
SDG Number: 250422010

Login Number: 189451
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-189451-1
SDG Number: 250422010

Login Number: 189451
List Number: 2
Creator: McDonald, Teigan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 04/23/25 08:28 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250710012 **Sample Date:** 7/10/2025

Sample ID Number: 250710012-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
COD	Contract Lab	EurofinsLancaster	7/22/2025	2700	mg/L	750		
Cyanide, Total	Contract Lab	EurofinsPittsburgh	7/23/2025	57	ug/L	10		
Ammonia-Nitrogen	Contract Lab	EurofinsPittsburgh	7/18/2025	29	mg/L	5.0		
Nitrate, as Nitrogen	Contract Lab	EurofinsPittsburgh	7/15/2025	0.13	mg/L	0.10		
pH	Contract Lab	EurofinsPittsburgh	7/15/2025	11.67	SU	0.1		
ASTM pH Temperature	Contract Lab	EurofinsPittsburgh	7/15/2025	25.9	°C	0.1	!	Laboratory is not accredited for this parameter. See attached report.
Sulfates	Contract Lab	EurofinsPittsburgh	7/15/2025	7.9	mg/L	1.0		
Total Solids	Contract Lab	EurofinsPittsburgh	7/17/2025	1500	mg/L	20		
Total Volatile Solids	Contract Lab	EurofinsPittsburgh	7/17/2025	930	mg/L	20	!	Laboratory is not accredited for this parameter. See attached report.
Chemistry								
Cyanide, Total	Contract Lab	EurofinsPittsburgh	7/15/2025	3.1	mg/kg dry	1.6		
Contract Lab								
Ignitability	Contract Lab	EurofinsLancaster	7/23/2025	>200	°F	50		
Chlordane	Contract Lab	EurofinsPittsburgh	7/16/2025	<48	ug/Kg Dry	48		

Printed Date
Friday, August 15, 2025

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ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250710012 **Sample Date:** 7/10/2025

Sample ID Number: 250710012-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Herbicides	Contract Lab	EurofinsPittsburgh	7/15/2025	See attached report	ug/Kg Dry			
Paint Filter Test	Contract Lab	EurofinsPittsburgh	7/18/2025	CNF		0.10		Contains No Free Liquids
Reactive Cyanide	Contract Lab	EurofinsLancaster	7/25/2025	<87	mg/kg	87	*+	LCS and/or LCSD is outside acceptance limits, high biased.
Reactive Sulfide	Contract Lab	EurofinsLancaster	7/24/2025	<150	mg/kg	150		
Total Sulfide	Contract Lab	EurofinsCleveland	7/16/2025	<85	mg/kg dry	85		
Toxaphene	Contract Lab	EurofinsPittsburgh	7/16/2025	<190	ug/Kg Dry	190		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/14/2025	35	%	0.50		
Percent Volatile Solids	Contract Lab	EurofinsPittsburgh	7/14/2025	50	%	0.50		
Daily 2								
pH	SW846 9045D	tbradley2	7/10/2025	12.37	s.u.			
Extractable Organics								
8270 BNA	Contract Lab	EurofinsPittsburgh	7/15/2025	See attached Report	ug/Kg Dry			
Pesticides	Contract Lab	EurofinsPittsburgh	7/16/2025	See attached report	ug/Kg Dry			
TCLP								
Boron	Contract Lab	EurofinsLancaster	7/18/2025	0.77	mg/L	0.50		

Printed Date
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Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250710012 **Sample Date:** 7/10/2025

Sample ID Number: 250710012-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Herbicides	Contract Lab	EurofinsPittsburgh	7/17/2025	See attached report	mg/L			
608 Pesticides	Contract Lab	EurofinsPittsburgh	7/16/2025	See Attached	mg/L			
TCLP BNA	Contract Lab	EurofinsPittsburgh	7/16/2025	See attached report	mg/L			
TCLP Volatile Organics	Contract Lab	EurofinsLancaster	7/24/2025	See Attached	mg/L			
Aluminum	Contract Lab	EurofinsLancaster	7/18/2025	11	mg/L	0.25		
Chloradane	Contract Lab	EurofinsPittsburgh	7/16/2025	<0.0050	mg/L	0.0050	^c	CCV Recovery is outside acceptance limits.
Arsenic	Contract Lab	EurofinsLancaster	7/18/2025	<0.020	mg/L	0.020		
Barium	Contract Lab	EurofinsLancaster	7/18/2025	0.31	mg/L	0.020		
Cadmium	Contract Lab	EurofinsLancaster	7/18/2025	<0.0050	mg/L	0.0050		
Chromium	Contract Lab	EurofinsLancaster	7/18/2025	<0.020	mg/L	0.020		
Copper	Contract Lab	EurofinsLancaster	7/18/2025	0.15	mg/L	0.010		
Silver	Contract Lab	EurofinsLancaster	7/18/2025	<0.0050	mg/L	0.0050		
Toxaphene	Contract Lab	EurofinsPittsburgh	7/16/2025	<0.040	mg/L	0.040		
Molybdenum	Contract Lab	EurofinsLancaster	7/18/2025	0.088	mg/L	0.0050		
Nickel	Contract Lab	EurofinsLancaster	7/18/2025	0.13	mg/L	0.010		

Printed Date
Friday, August 15, 2025

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ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250710012 **Sample Date:** 7/10/2025

Sample ID Number: 250710012-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Lead	Contract Lab	EurofinsLancaster	7/18/2025	<0.0050	mg/L	0.0050		
Antimony	Contract Lab	EurofinsLancaster	7/18/2025	<0.010	mg/L	0.010		
Selenium	Contract Lab	EurofinsLancaster	7/18/2025	0.012	mg/L	0.010		
Zinc	Contract Lab	EurofinsLancaster	7/18/2025	<0.10	mg/L	0.10		
Mercury	Contract Lab	EurofinsLancaster	7/18/2025	<0.00020	mg/L	0.00020		

Printed Date
Friday, August 15, 2025

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Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250710012 **Sample Date:** 7/10/2025

Sample ID Number: 250710012-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on July 10 from grabs collected on July 2, July 6, July 7, July 8, July 9, July 10.

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037
EurofinsCleveland	PADEP 68-00340

"ALCOSAN Laboratory reported SW846 9045D pH results are corrected to 25 deg. C using a temperature correction calculation"

Released by: Larissa Hawk 8-15-25

Date

Printed Date
Friday, August 15, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 7/28/2025 5:18:13 PM

JOB DESCRIPTION

Quarterly Limed Sludge
250710012

JOB NUMBER

180-193023-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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7/28/2025 5:18:13 PM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 6
Certification Summary 8
Sample Summary 9
Method Summary 10
Lab Chronicle 11
Client Sample Results 14
QC Sample Results 19
QC Association Summary 44
Chain of Custody 51
Receipt Checklists 59

Job Narrative
180-193023-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 7/11/2025 12:10 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5°C and 2.8°C.

Comments
The following is the pH to an additional decimal place for 9040C/ASTM: 11.67
The following test was analyzed on a water following ASTM Leach of the sludge. The lab is certified for this method in Non-Potable Water - SM2540E

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Method 8260D - TCLP: The continuing calibration verification (CCV) associated with batch 410-675427 recovered above the upper control limit for Vinyl chloride. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) analyzed in 180-499533 was outside the method criteria for the following analyte(s): 2-Nitroaniline and Di-n-octyl phthalate. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
Method 8151A: The continuing calibration verification (CCV) associated with 180-499528 recovered high and outside the control limits for 2,4,5-T on one column. Results are confirmed on both columns and either ND or reported from the passing column. The associated samples are: (CCV 180-499528/23) and (CCV 180-499528/34).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B: The continuing calibration verification (CCV) associated with 180-499606 recovered low and outside the control limits for Cis-chlordane and Endosulfan I on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCVIS 180-499606/6).

Method 8081B: Surrogate recovery for the following sample was outside control limits: 250710012-07 (180-193023-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8081B: The continuing calibration verification (CCV) associated with 180-499606 recovered low and outside the control limits for endosulfan I on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated sample is: (CCVIS 180-499606/35).

Method 8081B: The continuing calibration verification (CCV) associated with 180-499606 recovered high and outside the control

Job ID: 180-193023-1 (Continued)

limits for mirex on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated sample is: (CCV 180-499606/33).

Method 8081B: The continuing calibration verification (CCV) associated with 180-499606 recovered low and outside the control limits for chlordane on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated sample is: (CCV 180-499606/32).

Method 8081B - TCLP: The continuing calibration verification (CCV) associated with 180-499606 recovered low and outside the control limits for Cis-chlordane and Endosulfan I on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCVIS 180-499606/6).

Method 8081B - TCLP: The continuing calibration verification (CCV) associated with 180-499606 recovered low and outside the control limits for endosulfan I on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated sample is: (CCVIS 180-499606/35).

Method 8081B - TCLP: The continuing calibration verification (CCV) associated with 180-499606 recovered high and outside the control limits for mirex on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated sample is: (CCV 180-499606/33).

Method 8081B - TCLP: The continuing calibration verification (CCV) associated with 180-499606 recovered low and outside the control limits for chlordane on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated sample is: (CCV 180-499606/32).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 1010B: The Pensky Martens closed cup apparatus is designed to determine the flash point of a liquid sample. The sample submitted could not be mixed well enough to obtain uniform heating. The temperature being measured was that of the material near the top of the cup. The material at the bottom of the cup could have a higher temperature. The temperature reported may not be accurate.

Method 350.1 - ASTM Leach: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250710012-07 (180-193023-1). Elevated reporting limits (RLs) are provided.

Method 9012_ReactiveCN: The laboratory control sample (LCS) for preparation batch 410-675953 and analytical batch 410-676678 recovered outside control limits for the following analytes: reactive cyanide. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
B	Analyte was found in the blank.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
FL	MS and/or MSD recovery below control limits.

General Chemistry

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
F2	MS/MSD RPD exceeds control limits
FL	MS and/or MSD recovery below control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 9040C		Solid	Temperature
SM 2540E		Solid	Total Volatile Solids

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	68-00340	08-31-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-193023-1	250710012-07	Solid	07/10/25 10:10	07/11/25 12:10

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
8010D	Metals (ICP)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
1010B	Ignitability, Pensky-Martens Closed-Cup Method	SW846	ELLE
350.1_GD	Ammonia by Gas Diffusion	EPA	EET PIT
410.4	COD	EPA	ELLE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CLE
9034	Sulfide, Reactive	SW846	ELLE
EPA 9014	Cyanide	SW846	EET PIT
EPA 9040C	pH	SW846	EET PIT
EPA 9095B	Paint Filter	SW846	EET PIT
SM 2540B	Total Solids	SM	EET PIT
SM 2540E	Solids, Volatile and Fixed (VS)	SM	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
1311	TCLP Extraction	SW846	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW848	EET PIT
5030C	Purge and Trap	SW846	ELLE
7.3.3	Cyanide, Reactive	SW848	ELLE
7.3.4	Sulfide, Raactive	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET PIT
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CLE
D3987-85	ASTM Leaching Procedure	ASTM	EET PIT
D3987-85	ASTM Leaching Procedure	ASTM	ELLE
EPA 1311	TCLP Extraction	SW846	EET PIT

Protocol Referances:

ASTM = ASTM International
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Client Sample ID: 250710012-07

Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193023-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25.0 g	140 mL	673587	07/19/25 16:40	ZL4A	ELLE
TCLP	Analysis	8260D		20	5 mL	5 mL	675427	07/24/25 02:48	JS6E	ELLE
	Instrument ID: 23090									
TCLP	Leach	EPA 1311			100.25 g	2000 mL	499494	07/14/25 12:13	Z1M	EET PIT
TCLP	Prep	3510C			200 mL	10.0 mL	499597	07/15/25 21:16	VJC	EET PIT
TCLP	Analysis	EPA 8270E		1	1 mL	1 mL	499618	07/16/25 19:23	VVP	EET PIT
	Instrument ID: CH751									
TCLP	Leach	EPA 1311			100.25 g	2000 mL	499494	07/14/25 12:13	Z1M	EET PIT
TCLP	Prep	3510C			100 mL	40.0 mL	499599	07/15/25 21:23	VJC	EET PIT
TCLP	Analysis	EPA 8081B		1			499606	07/16/25 09:34	JMO	EET PIT
	Instrument ID: CHGC15									
TCLP	Leach	EPA 1311			100.25 g	2000 mL	499494	07/14/25 12:13	Z1M	EET PIT
TCLP	Prep	8151A			100 mL	10.0 mL	499596	07/15/25 21:09	VJC	EET PIT
TCLP	Analysis	EPA 8151A		10	1 mL	1 mL	499692	07/17/25 09:39	SJM	EET PIT
	Instrument ID: CGC1									
ASTM Leach	Leach	D3987-85			100.20 g	2000 mL	499464	07/14/25 09:06	Z1M	EET PIT
ASTM Leach	Analysis	EPA 9056A		1	1 mL	1 mL	499529	07/15/25 18:44	ERP	EET PIT
	Instrument ID: INTEGRION									
TCLP	Leach	1311			100.39 g	2000 mL	671966	07/16/25 15:20	UNWS	ELLE
TCLP	Prep	3005A			5 mL	50 mL	672962	07/17/25 23:15	UAMX	ELLE
TCLP	Analysis	6010D		1			673513	07/18/25 15:41	T8CQ	ELLE
	Instrument ID: T74 - 23745									
TCLP	Leach	1311			100.39 g	2000 mL	671966	07/16/25 15:20	UNWS	ELLE
TCLP	Prep	3005A			5 mL	50 mL	672962	07/17/25 23:15	UAMX	ELLE
TCLP	Analysis	6020B		1			673540	07/18/25 18:43	I9IN	ELLE
	Instrument ID: E08 - 30647									
TCLP	Leach	1311			100.39 g	2000 mL	671966	07/16/25 15:20	UNWS	ELLE
TCLP	Prep	7470A			20 mL	20 mL	672963	07/20/25 23:55	UAMX	ELLE
TCLP	Analysis	7470A		1			674502	07/22/25 07:11	X3ZX	ELLE
	Instrument ID: M10 – 31820									
Total/NA	Analysis	1010B		1	75 g	75 g	674946	07/23/25 06:12	USAE	ELLE
	Instrument ID: NOEQUIP						Completed:	07/23/25 06:12 [1]		
ASTM Leach	Leach	D3987-85			100.20 g	2000 mL	499464	07/14/25 09:06	Z1M	EET PIT
ASTM Leach	Analysis	350.1_GD		50			499804	07/18/25 10:18	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									
ASTM Leach	Leach	D3987-85			70.13 g	1400 mL	672588	07/17/25 15:40	UNWS	ELLE
ASTM Leach	Analysis	410.4		10	2 mL	2 mL	674526	07/22/25 09:22	USAE	ELLE
	Instrument ID: 11076H									
Total/NA	Prep	7.3.3			10.38 g	500 mL	675953	07/24/25 17:12	DZ3W	ELLE
Total/NA	Analysis	9012		1			676676	07/26/25 16:44	UJE2	ELLE
	Instrument ID: S0027									
Total/NA	Prep	7.3.3			10.38 g	500 mL	675953	07/24/25 17:12	DZ3W	ELLE
Total/NA	Analysis	9034		1	200 mL	200 mL	676081	07/24/25 22:16	DZ3W	ELLE
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Client Sample ID: 250710012-07

Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193023-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			100.20 g	2000 mL	499464	07/14/25 09:06	Z1M	EET PIT
ASTM Leach	Prep	9010C			10 mL	10 mL	500098	07/23/25 11:21	RAO	EET PIT
ASTM Leach	Analysis	EPA 9014		1			500132	07/23/25 15:55	RAO	EET PIT
	Instrument ID: JAWS									
ASTM Leach	Leach	D3987-85			100.20 g	2000 mL	499464	07/14/25 09:06	Z1M	EET PIT
ASTM Leach	Analysis	EPA 9040C		1			499588	07/15/25 16:22	RAO	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	EPA 9095B		1			499844	07/18/25 16:00	ELS	EET PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			100.20 g	2000 mL	499464	07/14/25 09:06	Z1M	EET PIT
ASTM Leach	Analysis	SM 2540B		1	50 mL	100 mL	499713	07/17/25 10:10	A1K	EET PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			100.20 g	2000 mL	499464	07/14/25 09:06	Z1M	EET PIT
ASTM Leach	Analysis	SM 2540E		1	50 mL	100 mL	499790	07/17/25 10:10	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540G		1			499491	07/14/25 11:27	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250710012-07

Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193023-1

Matrix: Solid
Percent Solids: 35.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	5.0 mL	499512	07/14/25 16:55	DVC	EET PIT
Total/NA	Analysis	EPA 8270E		3	1 mL	1 mL	499533	07/15/25 17:42	VVP	EET PIT
	Instrument ID: CH751									
Total/NA	Prep	3541			15.0 g	20.0 mL	499582	07/15/25 15:28	DVC	EET PIT
Total/NA	Analysis	EPA 8081B		1			499606	07/16/25 08:23	JMO	EET PIT
	Instrument ID: CHGC15									
Total/NA	Prep	8151A			10.2 g	40.0 mL	499439	07/13/26 22:01	VJC	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	499528	07/15/25 17:38	SJM	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	9030B			4.98 g	50 mL	664000	07/16/25 10:20	BLW	EET CLE
Total/NA	Analysis	9034		1			664022	07/16/25 11:16	BLW	EET CLE
	Instrument ID: 40311									
Total/NA	Prep	9010C			0.18 g	10 mL	499567	07/15/25 13:06	RAO	EET PIT
Total/NA	Analysis	EPA 9014		1			499591	07/15/25 15:55	RAO	EET PIT
	Instrument ID: SHAMU									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Analyst References:

Lab: EET CLE
- Batch Type: Prep
  - BLW = Bruce Woodward
- Batch Type: Analysis
  - BLW = Bruce Woodward

Lab: EET PIT
- Batch Type: Leach
  - Z1M = Zee Menakruzz
- Batch Type: Prep
  - DVC = Daniel Capodanno
  - RAO = Rachel Oster
  - VJC = Vincent Cervone
- Batch Type: Analysis
  - A1K = Agnes Komlos
  - BAB = Brooke Batyi
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - JMO = John Oravec
  - RAO = Rechel Oster
  - SJM = Shannon Mueller
  - VVP = Vincent Piccolino

Lab: ELLE
- Batch Type: Leach
  - UNWS = Nicholas Shroyer
  - ZL4A = Isac Moua
- Batch Type: Prep
  - DZ3W = Shaheed Salahuddin
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - DZ3W = Shaheed Salahuddin
  - I9IN = Miles Yiengst
  - JS6E = Gavin Walmer
  - T8CQ = Sera Bargo
  - UJE2 = Joseph McKenzie
  - USAE = Susan Engle
  - X3ZX = Skyler Ruf

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Client Sample ID: 250710012-07
Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193023-1
Matrix: Solid
Percent Solids: 35.3

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.020		mg/L			07/24/25 02:48	20
1,2-Dichloroethane	ND		0.020		mg/L			07/24/25 02:48	20
2-Butanone (MEK)	ND		0.20		mg/L			07/24/25 02:48	20
Benzene	ND	B	0.020		mg/L			07/24/25 02:48	20
Carbon tetrachloride	ND		0.020		mg/L			07/24/25 02:48	20
Chlorobenzene	ND		0.020		mg/L			07/24/25 02:48	20
Chloroform	ND		0.020		mg/L			07/24/25 02:48	20
Naphthalene	ND		0.10		mg/L			07/24/25 02:48	20
Tetrachloroethene	ND		0.020		mg/L			07/24/25 02:48	20
Trichloroethene	ND		0.020		mg/L			07/24/25 02:48	20
Vinyl chloride	ND	^c	0.020		mg/L			07/24/25 02:48	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*07/24/25 02:48*	*20*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*07/24/25 02:48*	*20*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*07/24/25 02:48*	*20*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/24/25 02:48*	*20*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Acenaphthylene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Acetophenone	ND		5700		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Anthracene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Atrazine	ND		5700		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Benzaldehyde	ND		5700		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Benzo[a]anthracene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Benzo[b]fluoranthene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Benzo[k]fluoranthene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Benzo[g,h,i]perylene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Benzo[a]pyrene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
1,1'-Biphenyl	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Bis(2-chloroethoxy)methane	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Bis(2-chloroethyl)ether	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2,2'-oxybis[1-chloropropane]	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Bis(2-ethylhexyl) phthalate	ND		28000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
4-Bromophenyl phenyl ether	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Butyl benzyl phthalate	ND		14000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Caprolactam	ND		14000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Carbazole	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
4-Chloroaniline	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
4-Chloro-3-methylphenol	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2-Chloronaphthalene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2-Chlorophenol	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
4-Chlorophenyl phenyl ether	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Chrysene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Dibenz(a,h)anthracene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Dibenzofuran	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Di-n-butyl phthalate	ND		28000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
3,3'-Dichlorobenzidine	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3

Client Sample ID: 250710012-07
Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193023-1
Matrix: Solid
Percent Solids: 35.3

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Diethyl phthalate	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2,4-Dimethylphenol	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Dimethyl phthalate	ND		5700		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
4,6-Dinitro-2-methylphenol	ND		14000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2,4-Dinitrophenol	ND		28000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2,4-Dinitrotoluene	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2,6-Dinitrotoluene	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Di-n-octyl phthalate	ND	^c	2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Fluoranthene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Fluorene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Hexachlorobenzene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Hexachlorobutadiene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Hexachlorocyclopentadiene	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Hexachloroethane	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Indeno[1,2,3-cd]pyrene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Isophorone	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2-Methylnaphthalene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2-Methylphenol	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Methylphenol, 3 & 4	**9300**		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Naphthalene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2-Nitroaniline	ND	^c	14000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
3-Nitroaniline	ND		14000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
4-Nitroaniline	ND		14000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Nitrobenzene	ND		5700		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2-Nitrophenol	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
4-Nitrophenol	ND		14000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
N-Nitrosodiphenylamine	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
N-Nitrosodi-n-propylamine	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Pentachlorophenol	ND		14000		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Phenanthrene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Phenol	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
Pyrene	ND		570		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2,4,5-Trichlorophenol	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3
2,4,6-Trichlorophenol	ND		2800		ug/Kg	☼	07/14/25 16:55	07/15/25 17:42	3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*44 - 105*	*07/14/25 16:55*	*07/15/25 17:42*	*3*
2-Fluorophenol	*59*		*48 - 105*	*07/14/25 16:55*	*07/15/25 17:42*	*3*
2,4,6-Tribromophenol	*41*		*34 - 108*	*07/14/25 16:55*	*07/15/25 17:42*	*3*
Nitrobenzene-d5	*68*		*46 - 105*	*07/14/25 16:55*	*07/15/25 17:42*	*3*
Phenol-d5	*66*		*46 - 105*	*07/14/25 16:55*	*07/15/25 17:42*	*3*
Terphenyl-d14	*64*		*39 - 105*	*07/14/25 16:55*	*07/15/25 17:42*	*3*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1
2,4-Dinitrotoluene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1
Hexachlorobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1
Hexachlorobutadiene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Client Sample ID: 250710012-07
Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193023-1
Matrix: Solid
Percent Solids: 35.3

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1
2-Methylphenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1
Methylphenol, 3 & 4	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1
Nitrobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1
Pentachlorophenol	ND		0.25		mg/L		07/15/25 21:16	07/16/25 19:23	1
Pyridine	ND		0.10		mg/L		07/15/25 21:16	07/16/25 19:23	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*10 - 130*	*07/15/25 21:16*	*07/16/25 19:23*	*1*
2-Fluorophenol	*93*		*10 - 130*	*07/15/25 21:16*	*07/16/25 19:23*	*1*
2,4,6-Tribromophenol	*74*		*10 - 130*	*07/15/25 21:16*	*07/16/25 19:23*	*1*
Nitrobenzene-d5	*99*		*10 - 130*	*07/15/25 21:16*	*07/16/25 19:23*	*1*
Phenol-d5	*91*		*10 - 130*	*07/15/25 21:16*	*07/16/25 19:23*	*1*
Terphenyl-d14	*96*		*10 - 130*	*07/15/25 21:16*	*07/16/25 19:23*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
alpha-BHC	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
beta-BHC	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
delta-BHC	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
gamma-BHC (Lindane)	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
cis-Chlordane	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
trans-Chlordane	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
4,4'-DDD	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Chlordane (technical)	ND		48		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
4,4'-DDE	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
4,4'-DDT	**14**	**p**	4.8		ug/Kg	☼	07/15/25 15:28	07/18/25 08:23	1
Dieldrin	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Endosulfan I	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Endosulfan II	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Endosulfan sulfate	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Endrin	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Endrin aldehyde	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Endrin ketone	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Heptachlor	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Heptachlor epoxide	ND		4.8		ug/Kg	☼	07/15/25 16:28	07/16/25 08:23	1
Methoxychlor	ND		4.8		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1
Toxaphene	ND		190		ug/Kg	☼	07/15/25 15:28	07/16/25 08:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*496*	*S1+*	*53 - 124*	*07/15/25 15:28*	*07/16/25 08:23*	*1*
Tetrachloro-m-xylene	*109*	*p*	*53 - 124*	*07/15/25 15:28*	*07/16/25 08:23*	*1*
DCB Decachlorobiphenyl (Surr)	*95*		*36 - 142*	*07/15/25 15:28*	*07/16/25 08:23*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*36 - 142*	*07/15/25 15:28*	*07/16/25 08:23*	*1*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Client Sample ID: 250710012-07
Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193023-1
Matrix: Solid
Percent Solids: 35.3

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND	^c	0.0050		mg/L		07/15/25 21:23	07/16/25 09:34	1
Endrin	ND		0.00050		mg/L		07/15/25 21:23	07/16/25 09:34	1
gamma-BHC (Lindane)	ND		0.00050		mg/L		07/15/25 21:23	07/16/25 09:34	1
Heptachlor	ND		0.00050		mg/L		07/15/25 21:23	07/16/25 09:34	1
Heptachlor epoxide	ND		0.00050		mg/L		07/15/25 21:23	07/16/25 09:34	1
Methoxychlor	ND		0.00050		mg/L		07/15/25 21:23	07/16/25 09:34	1
Toxaphene	ND		0.040		mg/L		07/15/25 21:23	07/16/25 09:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*33 - 120*	*07/15/25 21:23*	*07/16/25 09:34*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*33 - 120*	*07/15/25 21:23*	*07/16/25 09:34*	*1*
Tetrachloro-m-xylene	*102*		*15 - 141*	*07/15/25 21:23*	*07/16/25 09:34*	*1*
Tetrachloro-m-xylene	*93*		*15 - 141*	*07/15/25 21:23*	*07/16/25 09:34*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		220		ug/Kg	☼	07/13/25 22:01	07/15/25 17:38	1
2,4,5-T	ND		55		ug/Kg	☼	07/13/25 22:01	07/15/25 17:38	1
Silvex (2,4,5-TP)	ND		55		ug/Kg	☼	07/13/25 22:01	07/15/25 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*88*		*13 - 111*	*07/13/25 22:01*	*07/15/25 17:38*	*1*
2,4-Dichlorophenylacetic acid	*95*		*13 - 111*	*07/13/25 22:01*	*07/15/25 17:38*	*1*

Method: SW846 EPA 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.020		mg/L		07/15/25 21:09	07/17/25 09:39	10
Silvex (2,4,5-TP)	ND		0.0050		mg/L		07/15/25 21:09	07/17/25 09:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*36*		*13 - 111*	*07/15/25 21:09*	*07/17/25 09:39*	*10*
2,4-Dichlorophenylacetic acid	*37*		*13 - 111*	*07/15/25 21:09*	*07/17/25 09:39*	*10*

Method: SW846 EPA 9056A - Anions, Ion Chromatography - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**7.9**		1.0		mg/L			07/15/25 18:44	1
Nitrate as N	**0.13**		0.10		mg/L			07/15/25 18:44	1

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.77**		0.50		mg/L		07/17/25 23:15	07/18/25 15:41	1

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11**		0.25		mg/L		07/17/25 23:15	07/18/25 18:43	1
Arsenic	ND		0.020		mg/L		07/17/25 23:15	07/18/25 18:43	1
Barium	**0.31**		0.020		mg/L		07/17/25 23:15	07/18/25 18:43	1
Cadmium	ND		0.0050		mg/L		07/17/25 23:15	07/18/25 18:43	1
Chromium	ND		0.020		mg/L		07/17/25 23:15	07/18/25 18:43	1
Copper	**0.15**		0.010		mg/L		07/17/25 23:15	07/18/25 18:43	1
Silver	ND		0.0050		mg/L		07/17/25 23:15	07/18/25 18:43	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Client Sample ID: 250710012-07
Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193023-1
Matrix: Solid
Percent Solids: 35.3

Method: SW846 6020B - Metals (ICP/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	**0.088**		0.0050		mg/L		07/17/25 23:15	07/18/25 18:43	1
Nickel	**0.13**		0.010		mg/L		07/17/25 23:15	07/18/25 18:43	1
Lead	ND		0.0050		mg/L		07/17/25 23:15	07/18/25 18:43	1
Antimony	ND		0.010		mg/L		07/17/25 23:15	07/18/25 18:43	1
Selenium	**0.012**		0.010		mg/L		07/17/25 23:15	07/18/25 18:43	1
Zinc	ND		0.10		mg/L		07/17/25 23:15	07/18/25 18:43	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		07/20/25 23:55	07/22/25 07:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	**>200**		50		Degrees F			07/23/25 06:12	1
Cyanide, Reactive (SW846 9012)	ND	*+	87		mg/Kg		07/24/25 17:12	07/25/25 16:44	1
Sulfide (SW846 9034)	ND		85		mg/Kg	☼	07/16/25 10:20	07/16/25 11:16	1
Sulfide, Reactive (SW846 9034)	ND		150		mg/Kg		07/24/25 17:12	07/24/25 22:16	1
Cyanide, Total (SW846 EPA 9014)	**3.1**		1.6		mg/Kg	☼	07/15/25 13:06	07/15/25 15:55	1
Free Liquid (SW846 EPA 9095B)	**CNF**		0.10		NONE			07/18/25 16:00	1
Total Solids (SM 2540G)	**35**		0.50		%			07/14/25 11:27	1
Total Volatile Solids (SM 2540G)	**50**		0.50		%			07/14/25 11:27	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled (EPA 350.1_GD)	**29**		5.0		mg/L			07/18/25 10:18	50
Chemical Oxygen Demand (EPA 410.4)	**2700**		750		mg/L			07/22/25 09:22	10
Cyanide, Total (SW846 EPA 9014)	**57**		10		ug/L		07/23/25 11:21	07/23/25 15:55	1
pH (SW846 EPA 9040C)	**11.7**		0.1		SU			07/15/25 16:22	1
Temperature (SW846 EPA 9040C)	**25.9**	I	0.1		Degrees C			07/15/25 16:22	1
Total Solids (SM 2540B)	**1500**		20		mg/L			07/17/25 10:10	1
Total Volatile Solids (SM 2540E)	**930**	I	20		mg/L			07/17/25 10:10	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-675427/8
Matrix: Solid
Analysis Batch: 675427

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010		mg/L			07/23/25 23:01	1
1,2-Dichloroethane	ND		0.0010		mg/L			07/23/25 23:01	1
2-Butanone (MEK)	ND		0.010		mg/L			07/23/25 23:01	1
Benzene	ND		0.0010		mg/L			07/23/25 23:01	1
Carbon tetrachloride	ND		0.0010		mg/L			07/23/25 23:01	1
Chlorobenzene	ND		0.0010		mg/L			07/23/25 23:01	1
Chloroform	ND		0.0010		mg/L			07/23/25 23:01	1
Naphthalene	ND		0.0050		mg/L			07/23/25 23:01	1
Tetrachloroethene	ND		0.0010		mg/L			07/23/25 23:01	1
Trichloroethene	ND		0.0010		mg/L			07/23/25 23:01	1
Vinyl chloride	ND		0.0010		mg/L			07/23/25 23:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*07/23/25 23:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/23/25 23:01*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*07/23/25 23:01*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/23/25 23:01*	*1*

Lab Sample ID: LCS 410-675427/5
Matrix: Solid
Analysis Batch: 675427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	0.0200	0.0206		mg/L		103	80 - 131
1,2-Dichloroethane	0.0200	0.0189		mg/L		95	73 - 124
2-Butanone (MEK)	0.250	0.257		mg/L		103	59 - 135
Benzene	0.0200	0.0193		mg/L		97	80 - 120
Carbon tetrachloride	0.0200	0.0208		mg/L		104	64 - 134
Chlorobenzene	0.0200	0.0185		mg/L		93	80 - 120
Chloroform	0.0200	0.0194		mg/L		97	80 - 120
Naphthalene	0.0200	0.0174		mg/L		87	67 - 124
Tetrachloroethene	0.0200	0.0171		mg/L		86	80 - 120
Trichloroethene	0.0200	0.0187		mg/L		93	80 - 120
Vinyl chloride	0.0200	0.0211		mg/L		106	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 410-231517-A-1-A MS
Matrix: Solid
Analysis Batch: 675427

Client Sample ID: Matrix Spike
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	ND		0.400	0.441		mg/L		110	74 - 121
1,2-Dichloroethane	ND		0.400	0.394		mg/L		99	69 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-231517-A-1-A MS
Matrix: Solid
Analysis Batch: 675427

Client Sample ID: Matrix Spike
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-Butanone (MEK)	ND		5.00	5.01		mg/L		100	65 - 131
Benzene	ND	B	0.400	0.413		mg/L		103	81 - 120
Carbon tetrachloride	ND		0.400	0.452		mg/L		113	63 - 128
Chlorobenzene	ND		0.400	0.395		mg/L		99	80 - 120
Chloroform	ND		0.400	0.409		mg/L		102	74 - 120
Naphthalene	ND		0.400	0.345		mg/L		88	82 - 120
Tetrachloroethene	ND		0.400	0.383		mg/L		96	68 - 125
Trichloroethene	ND		0.400	0.399		mg/L		100	76 - 120
Vinyl chloride	ND	^c	0.400	0.417		mg/L		104	52 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 410-231517-A-1-A MSD
Matrix: Solid
Analysis Batch: 675427

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	ND		0.400	0.458		mg/L		115	74 - 121	4	30
1,2-Dichloroethane	ND		0.400	0.410		mg/L		103	89 - 120	4	30
2-Butanone (MEK)	ND		5.00	5.11		mg/L		102	65 - 131	2	30
Benzene	ND	B	0.400	0.423		mg/L		106	81 - 120	2	30
Carbon tetrachloride	ND		0.400	0.474		mg/L		119	63 - 128	5	30
Chlorobenzene	ND		0.400	0.400		mg/L		100	80 - 120	1	30
Chloroform	ND		0.400	0.425		mg/L		106	74 - 120	4	30
Naphthalene	ND		0.400	0.357		mg/L		89	62 - 120	3	30
Tetrachloroethene	ND		0.400	0.387		mg/L		97	68 - 125	1	30
Trichloroethene	ND		0.400	0.409		mg/L		102	76 - 120	2	30
Vinyl chloride	ND	^c	0.400	0.436		mg/L		109	52 - 120	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-499512/1-A
Matrix: Solid
Analysis Batch: 499533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Acenaphthylene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-499512/1-A
Matrix: Solid
Analysis Batch: 499533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	ND		670		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Anthracene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Atrazine	ND		670		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Benzaldehyde	ND		670		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Benzo[a]anthracene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Benzo[b]fluoranthene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Benzo[k]fluoranthene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Benzo[g,h,i]perylene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Benzo[a]pyrene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
1,1'-Biphenyl	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Bis(2-chloroethyl)ether	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2,2'-oxybis[1-chloropropane]	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Bis(2-ethylhexyl) phthalate	ND		3300		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Butyl benzyl phthalate	ND		1700		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Caprolactam	ND		1700		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Carbazole	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
4-Chloroaniline	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2-Chloronaphthalene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2-Chlorophenol	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Chrysene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Dibenz(a,h)anthracene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Dibenzofuran	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Di-n-butyl phthalate	ND		3300		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
3,3'-Dichlorobenzidine	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2,4-Dichlorophenol	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Diethyl phthalate	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2,4-Dimethylphenol	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Dimethyl phthalate	ND		670		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
4,6-Dinitro-2-methylphenol	ND		1700		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2,4-Dinitrophenol	ND		3300		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2,4-Dinitrotoluene	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2,6-Dinitrotoluene	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Di-n-octyl phthalate	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Fluoranthene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Fluorene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Hexachlorobenzene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Hexachlorobutadiene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Hexachlorocyclopentadiene	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Hexachloroethane	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Indeno[1,2,3-cd]pyrene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Isophorone	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2-Methylnaphthalene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2-Methylphenol	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Methylphenol, 3 & 4	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Naphthalene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-499512/1-A
Matrix: Solid
Analysis Batch: 499533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499512

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		1700		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
3-Nitroaniline	ND		1700		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
4-Nitroaniline	ND		1700		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Nitrobenzene	ND		670		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2-Nitrophenol	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
4-Nitrophenol	ND		1700		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
N-Nitrosodiphenylamine	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
N-Nitrosodi-n-propylamine	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Pentachlorophenol	ND		1700		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Phenanthrene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Phenol	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
Pyrene	ND		67		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1
2,4,6-Trichlorophenol	ND		330		ug/Kg		07/14/25 16:55	07/15/25 10:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*44 - 105*	*07/14/25 16:55*	*07/15/25 10:42*	*1*
2-Fluorophenol	*83*		*48 - 105*	*07/14/25 16:55*	*07/15/25 10:42*	*1*
2,4,6-Tribromophenol	*70*		*34 - 108*	*07/14/25 16:55*	*07/15/25 10:42*	*1*
Nitrobenzene-d5	*83*		*46 - 105*	*07/14/25 16:55*	*07/15/25 10:42*	*1*
Phenol-d5	*85*		*46 - 105*	*07/14/25 16:55*	*07/15/25 10:42*	*1*
Terphenyl-d14	*78*		*39 - 105*	*07/14/25 16:55*	*07/15/25 10:42*	*1*

Lab Sample ID: LCS 180-499512/2-A
Matrix: Solid
Analysis Batch: 499533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	6670	4240		ug/Kg		64	50 - 100
Acenaphthylene	6670	4460		ug/Kg		67	52 - 100
Acetophenone	6670	4770		ug/Kg		72	48 - 100
Anthracene	6670	4410		ug/Kg		66	53 - 100
Atrazine	6670	4920		ug/Kg		74	49 - 103
Benzaldehyde	6670	5400		ug/Kg		81	23 - 105
Benzo[a]anthracene	6670	4350		ug/Kg		65	51 - 100
Benzo[b]fluoranthene	6670	4110		ug/Kg		62	46 - 100
Benzo[k]fluoranthene	6670	4420		ug/Kg		66	19 - 100
Benzo[g,h,i]perylene	6670	4200		ug/Kg		63	48 - 105
Benzo[a]pyrene	6670	4290		ug/Kg		64	51 - 100
1,1'-Biphenyl	6670	4260		ug/Kg		64	50 - 100
Bis(2-chloroethoxy)methane	6670	3560		ug/Kg		53	49 - 100
Bis(2-chloroethyl)ether	6670	4530		ug/Kg		68	48 - 100
2,2'-oxybis[1-chloropropane]	6670	5320		ug/Kg		80	30 - 113
Bis(2-ethylhexyl) phthalate	6670	5320		ug/Kg		80	53 - 107
4-Bromophenyl phenyl ether	6670	4360		ug/Kg		65	52 - 101
Butyl benzyl phthalate	6670	5210		ug/Kg		78	52 - 107
Caprolactam	6670	4970		ug/Kg		74	48 - 111
Carbazole	6670	4420		ug/Kg		66	53 - 100

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-499512/2-A
Matrix: Solid
Analysis Batch: 499533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499512

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chloroaniline	6670	4520		ug/Kg		68	47 - 100
4-Chloro-3-methylphenol	6670	4750		ug/Kg		71	49 - 108
2-Chloronaphthalene	6670	4260		ug/Kg		64	51 - 100
2-Chlorophenol	6670	4950		ug/Kg		74	51 - 100
4-Chlorophenyl phenyl ether	6670	4100		ug/Kg		62	52 - 100
Chrysene	6670	4070		ug/Kg		61	50 - 100
Dibenz(a,h)anthracene	6670	4560		ug/Kg		68	50 - 107
Dibenzofuran	6670	4150		ug/Kg		62	52 - 100
Di-n-butyl phthalate	6670	5010		ug/Kg		75	57 - 102
3,3'-Dichlorobenzidine	6670	4170		ug/Kg		63	43 - 100
2,4-Dichlorophenol	6670	4540		ug/Kg		68	53 - 101
Diethyl phthalate	6670	4330		ug/Kg		65	46 - 104
2,4-Dimethylphenol	6670	4600		ug/Kg		69	51 - 101
Dimethyl phthalate	6670	4320		ug/Kg		65	53 - 100
4,6-Dinitro-2-methylphenol	13300	8470		ug/Kg		64	51 - 100
2,4-Dinitrophenol	13300	8480		ug/Kg		64	33 - 101
2,4-Dinitrotoluene	6670	4570		ug/Kg		69	54 - 104
2,6-Dinitrotoluene	6670	4530		ug/Kg		68	51 - 106
Di-n-octyl phthalate	6670	5740		ug/Kg		86	41 - 106
Fluoranthene	6670	4510		ug/Kg		68	55 - 100
Fluorene	6670	4140		ug/Kg		62	52 - 100
Hexachlorobenzene	6670	4020		ug/Kg		60	49 - 100
Hexachlorobutadiene	6670	4040		ug/Kg		61	36 - 107
Hexachlorocyclopentadiene	6670	4720		ug/Kg		71	33 - 117
Hexachloroethane	6670	4640		ug/Kg		70	47 - 100
Indeno[1,2,3-cd]pyrene	6670	4360		ug/Kg		65	51 - 103
Isophorone	6670	4100		ug/Kg		62	46 - 105
2-Methylnaphthalene	6670	4350		ug/Kg		65	53 - 100
2-Methylphenol	6670	5100		ug/Kg		76	50 - 101
Methylphenol, 3 & 4	6670	5050		ug/Kg		76	50 - 103
Naphthalene	6670	4240		ug/Kg		64	51 - 100
2-Nitroaniline	6670	5360		ug/Kg		80	42 - 123
3-Nitroaniline	6670	4620		ug/Kg		69	50 - 103
4-Nitroaniline	6670	4410		ug/Kg		66	52 - 103
Nitrobenzene	6670	4800		ug/Kg		72	44 - 106
2-Nitrophenol	6670	4810		ug/Kg		72	55 - 107
4-Nitrophenol	13300	9700		ug/Kg		73	30 - 134
N-Nitrosodiphenylamine	6670	4440		ug/Kg		67	52 - 100
N-Nitrosodi-n-propylamine	6670	5530		ug/Kg		83	45 - 107
Pentachlorophenol	13300	8980		ug/Kg		67	42 - 110
Phenanthrene	6670	4190		ug/Kg		63	53 - 100
Phenol	6670	5130		ug/Kg		77	49 - 100
Pyrene	6670	4390		ug/Kg		66	52 - 100
2,4,5-Trichlorophenol	6670	4560		ug/Kg		68	50 - 104
2,4,6-Trichlorophenol	6670	4610		ug/Kg		69	50 - 105

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*44 - 105*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-499512/2-A
Matrix: Solid
Analysis Batch: 499533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499512

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*74*		*48 - 105*
2,4,6-Tribromophenol	*67*		*34 - 108*
Nitrobenzene-d5	*74*		*46 - 105*
Phenol-d5	*75*		*46 - 105*
Terphenyl-d14	*46*		*39 - 105*

Lab Sample ID: LCSD 180-499512/3-A
Matrix: Solid
Analysis Batch: 499533

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499512

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	6670	4340		ug/Kg		65	50 - 100	2	20
Acenaphthylene	6670	4580		ug/Kg		69	52 - 100	3	20
Acetophenone	6670	4700		ug/Kg		71	48 - 100	1	17
Anthracene	6670	4660		ug/Kg		70	53 - 100	5	20
Atrazine	6670	5160		ug/Kg		77	49 - 103	5	19
Benzaldehyde	6670	4780		ug/Kg		72	23 - 105	12	31
Benzo[a]anthracene	6670	4670		ug/Kg		70	51 - 100	7	21
Benzo[b]fluoranthene	6670	4590		ug/Kg		69	48 - 100	11	20
Benzo[k]fluoranthene	6670	4530		ug/Kg		68	19 - 100	3	20
Benzo[g,h,i]perylene	6670	4430		ug/Kg		66	48 - 105	5	19
Benzo[a]pyrene	6670	4570		ug/Kg		69	51 - 100	6	20
1,1'-Biphenyl	6670	4360		ug/Kg		66	50 - 100	3	19
Bis(2-chloroethoxy)methane	6670	3710		ug/Kg		56	49 - 100	4	20
Bis(2-chloroethyl)ether	6670	4510		ug/Kg		68	48 - 100	0	18
2,2'-oxybis[1-chloropropane]	6670	5340		ug/Kg		80	30 - 113	0	17
Bis(2-ethylhexyl) phthalate	6670	5680		ug/Kg		85	53 - 107	7	20
4-Bromophenyl phenyl ether	6670	4550		ug/Kg		68	52 - 101	4	20
Butyl benzyl phthalate	6670	5580		ug/Kg		84	52 - 107	7	19
Caprolactam	6670	4990		ug/Kg		75	48 - 111	0	23
Carbazole	6670	4660		ug/Kg		70	53 - 100	5	20
4-Chloroaniline	6670	4560		ug/Kg		68	47 - 100	1	20
4-Chloro-3-methylphenol	6670	4610		ug/Kg		69	49 - 106	3	20
2-Chloronaphthalene	6670	4430		ug/Kg		66	51 - 100	4	20
2-Chlorophenol	6670	4880		ug/Kg		73	51 - 100	1	17
4-Chlorophenyl phenyl ether	6670	4140		ug/Kg		62	52 - 100	1	19
Chrysene	6670	4240		ug/Kg		64	50 - 100	4	20
Dibenz(a,h)anthracene	6670	4800		ug/Kg		72	50 - 107	5	21
Dibenzofuran	6670	4230		ug/Kg		63	52 - 100	2	19
Di-n-butyl phthalate	6670	5250		ug/Kg		79	57 - 102	5	20
3,3'-Dichlorobenzidine	6670	4350		ug/Kg		65	43 - 100	4	19
2,4-Dichlorophenol	6670	4580		ug/Kg		69	53 - 101	1	22
Diethyl phthalate	6670	4540		ug/Kg		68	48 - 104	5	20
2,4-Dimethylphenol	6670	4720		ug/Kg		71	51 - 101	2	32
Dimethyl phthalate	6670	4470		ug/Kg		67	53 - 100	3	21
4,6-Dinitro-2-methylphenol	13300	9130		ug/Kg		68	51 - 100	7	22
2,4-Dinitrophenol	13300	8900		ug/Kg		67	33 - 101	5	20
2,4-Dinitrotoluene	6670	4660		ug/Kg		70	54 - 104	2	20

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-499512/3-A
Matrix: Solid
Analysis Batch: 499533

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499512

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,6-Dinitrotoluene	6670	4640		ug/Kg		70	51 - 106	2	20
Di-n-octyl phthalate	6670	6200		ug/Kg		93	41 - 106	8	18
Fluoranthene	6670	4600		ug/Kg		69	55 - 100	2	20
Fluorene	6670	4300		ug/Kg		65	52 - 100	4	19
Hexachlorobenzene	6670	4220		ug/Kg		63	49 - 100	5	20
Hexachlorobutadiene	6670	4170		ug/Kg		63	36 - 107	3	22
Hexachlorocyclopentadiene	6670	5040		ug/Kg		76	33 - 117	7	19
Hexachloroethane	6670	4830		ug/Kg		73	47 - 100	4	17
Indeno[1,2,3-cd]pyrene	6670	4640		ug/Kg		70	51 - 103	6	19
Isophorone	6670	4100		ug/Kg		62	46 - 105	0	20
2-Methylnaphthalene	6670	4510		ug/Kg		68	53 - 100	3	21
2-Methylphenol	6670	4920		ug/Kg		74	50 - 101	3	17
Methylphenol, 3 & 4	6670	4940		ug/Kg		74	50 - 103	2	19
Naphthalene	6670	4430		ug/Kg		66	51 - 100	4	20
2-Nitroaniline	6670	5490		ug/Kg		82	42 - 123	2	19
3-Nitroaniline	6670	4710		ug/Kg		71	50 - 103	2	20
4-Nitroaniline	6670	4580		ug/Kg		69	52 - 103	4	18
Nitrobenzene	6670	4950		ug/Kg		74	44 - 108	3	21
2-Nitrophenol	6670	4900		ug/Kg		74	55 - 107	2	19
4-Nitrophenol	13300	10200		ug/Kg		76	30 - 134	5	18
N-Nitrosodiphenylamine	6670	4660		ug/Kg		70	52 - 100	5	20
N-Nitrosodi-n-propylamine	6670	5280		ug/Kg		79	45 - 107	5	18
Pentachlorophenol	13300	9360		ug/Kg		70	42 - 110	4	20
Phenanthrene	6670	4420		ug/Kg		66	53 - 100	5	20
Phenol	6670	4910		ug/Kg		74	49 - 100	4	16
Pyrene	6670	4670		ug/Kg		70	52 - 100	6	20
2,4,5-Trichlorophenol	6670	4710		ug/Kg		71	50 - 104	3	21
2,4,6-Trichlorophenol	6670	4690		ug/Kg		70	50 - 105	2	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*44 - 105*
2-Fluorophenol	*74*		*48 - 105*
2,4,6-Tribromophenol	*69*		*34 - 108*
Nitrobenzene-d5	*74*		*46 - 105*
Phenol-d5	*74*		*46 - 105*
Terphenyl-d14	*48*		*39 - 105*

Lab Sample ID: MB 180-499597/1-A
Matrix: Solid
Analysis Batch: 499618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499597

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1
Pyridine	ND		0.10		mg/L		07/15/25 21:16	07/16/25 09:46	1
2,4-Dinitrotoluene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1
Hexachlorobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1
Hexachlorobutadiene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1
Hexachloroethane	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-499597/1-A
Matrix: Solid
Analysis Batch: 499618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499597

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1
Methylphenol, 3 & 4	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1
Nitrobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1
Pentachlorophenol	ND		0.25		mg/L		07/15/25 21:16	07/16/25 09:46	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 09:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*10 - 130*	*07/15/25 21:16*	*07/16/25 09:46*	*1*
2-Fluorophenol	*92*		*10 - 130*	*07/15/25 21:16*	*07/16/25 09:46*	*1*
2,4,6-Tribromophenol	*81*		*10 - 130*	*07/15/25 21:16*	*07/16/25 09:46*	*1*
Nitrobenzene-d5	*95*		*10 - 130*	*07/15/25 21:16*	*07/16/25 09:46*	*1*
Phenol-d5	*93*		*10 - 130*	*07/15/25 21:16*	*07/16/25 09:46*	*1*
Terphenyl-d14	*90*		*10 - 130*	*07/15/25 21:16*	*07/16/25 09:46*	*1*

Lab Sample ID: LCS 180-499597/2-A
Matrix: Solid
Analysis Batch: 499618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	0.250	0.193		mg/L		77	10 - 130
Pyridine	0.250	0.197		mg/L		79	10 - 130
2,4-Dinitrotoluene	0.250	0.140		mg/L		56	10 - 130
Hexachlorobenzene	0.250	0.142		mg/L		57	10 - 130
Hexachlorobutadiene	0.250	0.180		mg/L		72	10 - 130
Hexachloroethane	0.250	0.208		mg/L		83	10 - 130
2-Methylphenol	0.250	0.210		mg/L		84	10 - 130
Methylphenol, 3 & 4	0.500	0.421		mg/L		84	10 - 130
Nitrobenzene	0.250	0.221		mg/L		88	10 - 130
Pentachlorophenol	0.250	0.165	J	mg/L		66	10 - 130
2,4,5-Trichlorophenol	0.250	0.197		mg/L		79	10 - 130
2,4,6-Trichlorophenol	0.250	0.193		mg/L		77	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*10 - 130*
2-Fluorophenol	*84*		*10 - 130*
2,4,6-Tribromophenol	*73*		*10 - 130*
Nitrobenzene-d5	*87*		*10 - 130*
Phenol-d5	*86*		*10 - 130*
Terphenyl-d14	*83*		*10 - 130*

Lab Sample ID: LCSD 180-499597/3-A
Matrix: Solid
Analysis Batch: 499618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499597

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.250	0.189		mg/L		76	10 - 130	2	15
Pyridine	0.250	0.193		mg/L		77	10 - 130	2	15

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-499597/3-A
Matrix: Solid
Analysis Batch: 499618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499597

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-Dinitrotoluene	0.250	0.146		mg/L		58	10 - 130	4	15
Hexachlorobenzene	0.250	0.142		mg/L		57	10 - 130	0	15
Hexachlorobutadiene	0.250	0.185		mg/L		74	10 - 130	3	15
Hexachloroethane	0.250	0.203		mg/L		81	10 - 130	3	15
2-Methylphenol	0.250	0.204		mg/L		81	10 - 130	3	15
Methylphenol, 3 & 4	0.500	0.415		mg/L		83	10 - 130	2	15
Nitrobenzene	0.250	0.227		mg/L		91	10 - 130	3	15
Pentachlorophenol	0.250	0.164	J	mg/L		86	10 - 130	1	27
2,4,5-Trichlorophenol	0.250	0.194		mg/L		78	10 - 130	1	15
2,4,6-Trichlorophenol	0.250	0.199		mg/L		80	10 - 130	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*10 - 130*
2-Fluorophenol	*83*		*10 - 130*
2,4,6-Tribromophenol	*74*		*10 - 130*
Nitrobenzene-d5	*89*		*10 - 130*
Phenol-d5	*84*		*10 - 130*
Terphenyl-d14	*85*		*10 - 130*

Lab Sample ID: LB2 180-499494/1-C
Matrix: Solid
Analysis Batch: 499618

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 499597

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
Pyridine	ND		0.10		mg/L		07/15/25 21:16	07/16/25 10:54	1
2,4-Dinitrotoluene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
Hexachlorobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
Hexachlorobutadiene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
Hexachloroethane	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
2-Methylphenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
Methylphenol, 3 & 4	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
Nitrobenzene	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
Pentachlorophenol	ND		0.25		mg/L		07/15/25 21:18	07/16/25 10:54	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		07/15/25 21:16	07/16/25 10:54	1

Surrogate	*LB2 %Recovery*	*LB2 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*10 - 130*	*07/15/25 21:16*	*07/16/25 10:54*	*1*
2-Fluorophenol	*82*		*10 - 130*	*07/15/25 21:16*	*07/16/25 10:54*	*1*
2,4,6-Tribromophenol	*75*		*10 - 130*	*07/15/25 21:16*	*07/16/25 10:54*	*1*
Nitrobenzene-d5	*88*		*10 - 130*	*07/15/25 21:16*	*07/16/25 10:54*	*1*
Phenol-d5	*84*		*10 - 130*	*07/15/25 21:16*	*07/16/25 10:54*	*1*
Terphenyl-d14	*84*		*10 - 130*	*07/15/25 21:16*	*07/16/25 10:54*	*1*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-499582/1-A
Matrix: Solid
Analysis Batch: 499606

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499582

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
alpha-BHC	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
beta-BHC	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
delta-BHC	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
gamma-BHC (Lindane)	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
cis-Chlordane	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
trans-Chlordane	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
4,4'-DDD	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Chlordane (technical)	ND		17		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
4,4'-DDE	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
4,4'-DDT	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Dieldrin	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Endosulfan I	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Endosulfan II	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Endosulfan sulfate	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Endrin	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Endrin aldehyde	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Endrin ketone	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Heptachlor	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Heptachlor epoxide	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Methoxychlor	ND		1.7		ug/Kg		07/15/25 15:28	07/16/25 06:55	1
Toxaphene	ND		67		ug/Kg		07/15/25 15:28	07/16/25 06:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*104*		*53 - 124*	*07/15/25 15:28*	*07/16/25 06:55*	*1*
Tetrachloro-m-xylene	*96*		*53 - 124*	*07/15/25 15:28*	*07/16/25 06:55*	*1*
DCB Decachlorobiphenyl (Surr)	*95*		*36 - 142*	*07/15/25 15:28*	*07/16/25 06:55*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*36 - 142*	*07/15/25 15:28*	*07/16/25 06:55*	*1*

Lab Sample ID: LCS 180-499582/2-A
Matrix: Solid
Analysis Batch: 499606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499582

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	33.3	34.5		ug/Kg		104	60 - 136
alpha-BHC	33.3	34.4		ug/Kg		103	62 - 138
beta-BHC	33.3	34.5		ug/Kg		104	60 - 130
delta-BHC	33.3	22.2		ug/Kg		67	41 - 136
gamma-BHC (Lindane)	33.3	35.5		ug/Kg		106	64 - 138
cis-Chlordane	33.3	33.8		ug/Kg		102	57 - 135
trans-Chlordane	33.3	35.1		ug/Kg		105	59 - 137
4,4'-DDD	33.3	41.9		ug/Kg		126	56 - 137
4,4'-DDE	33.3	40.6		ug/Kg		122	64 - 132
4,4'-DDT	33.3	37.8		ug/Kg		113	44 - 129
Dieldrin	33.3	40.9		ug/Kg		123	68 - 133
Endosulfan I	33.3	35.5		ug/Kg		106	53 - 148
Endosulfan II	33.3	39.3		ug/Kg		118	65 - 130
Endosulfan sulfate	33.3	35.4		ug/Kg		106	50 - 132

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-499582/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499606 — **Prep Batch: 499582**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Endrin	33.3	45.1		ug/Kg		135	72 - 138
Endrin aldehyde	33.3	39.1		ug/Kg		117	47 - 139
Endrin ketone	33.3	38.4		ug/Kg		115	62 - 129
Heptachlor	33.3	36.2		ug/Kg		109	56 - 144
Heptachlor epoxide	33.3	35.6		ug/Kg		107	65 - 140
Methoxychlor	33.3	39.1		ug/Kg		117	37 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*108*		*53 - 124*
Tetrachloro-m-xylene	*100*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*100*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*101*		*36 - 142*

Lab Sample ID: LCSD 180-499582/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499606 — **Prep Batch: 499582**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	33.3	32.1		ug/Kg		96	60 - 136	7	21
alpha-BHC	33.3	32.1		ug/Kg		96	62 - 138	7	31
beta-BHC	33.3	32.2		ug/Kg		96	60 - 130	7	30
delta-BHC	33.3	20.6		ug/Kg		62	41 - 136	7	23
gamma-BHC (Lindane)	33.3	32.9		ug/Kg		99	64 - 138	8	30
cis-Chlordane	33.3	31.3		ug/Kg		94	57 - 135	8	22
trans-Chlordane	33.3	31.9		ug/Kg		96	59 - 137	10	22
4,4'-DDD	33.3	38.6		ug/Kg		116	56 - 137	8	22
4,4'-DDE	33.3	37.1		ug/Kg		111	64 - 132	9	16
4,4'-DDT	33.3	33.9		ug/Kg		102	44 - 129	11	37
Dieldrin	33.3	38.0		ug/Kg		114	68 - 133	7	18
Endosulfan I	33.3	33.0		ug/Kg		99	53 - 148	7	23
Endosulfan II	33.3	36.1		ug/Kg		108	65 - 130	9	18
Endosulfan sulfate	33.3	32.0		ug/Kg		96	50 - 132	10	21
Endrin	33.3	41.8		ug/Kg		125	72 - 138	8	17
Endrin aldehyde	33.3	35.9		ug/Kg		108	47 - 139	9	19
Endrin ketone	33.3	35.4		ug/Kg		106	62 - 129	8	21
Heptachlor	33.3	33.7		ug/Kg		101	56 - 144	7	19
Heptachlor epoxide	33.3	33.2		ug/Kg		99	65 - 140	7	21
Methoxychlor	33.3	34.2		ug/Kg		103	37 - 140	13	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*101*		*53 - 124*
Tetrachloro-m-xylene	*94*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*94*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*92*		*36 - 142*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 180-499599/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499606 — **Prep Batch: 499599**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.000050		mg/L		07/15/25 21:23	07/16/25 08:41	1
Chlordane (technical)	ND		0.00050		mg/L		07/15/25 21:23	07/16/25 08:41	1
Endrin	ND		0.000050		mg/L		07/15/25 21:23	07/16/25 08:41	1
Heptachlor	ND		0.000050		mg/L		07/15/25 21:23	07/16/25 08:41	1
Heptachlor epoxide	ND		0.000050		mg/L		07/15/25 21:23	07/16/25 08:41	1
Methoxychlor	ND		0.000050		mg/L		07/15/25 21:23	07/16/25 08:41	1
Toxaphene	ND		0.0040		mg/L		07/15/25 21:23	07/16/25 08:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*15 - 141*	*07/15/25 21:23*	*07/16/25 08:41*	*1*
Tetrachloro-m-xylene	*95*		*15 - 141*	*07/15/25 21:23*	*07/16/25 08:41*	*1*
DCB Decachlorobiphenyl (Surr)	*94*		*33 - 120*	*07/15/25 21:23*	*07/16/25 08:41*	*1*
DCB Decachlorobiphenyl (Surr)	*89*		*33 - 120*	*07/15/25 21:23*	*07/16/25 08:41*	*1*

Lab Sample ID: LCS 180-499599/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499606 — **Prep Batch: 499599**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-BHC (Lindane)	0.00100	0.000935		mg/L		94	62 - 120
Endrin	0.00100	0.00121		mg/L		121	62 - 138
Heptachlor	0.00100	0.000930		mg/L		93	53 - 119
Heptachlor epoxide	0.00100	0.000936		mg/L		94	63 - 125
Methoxychlor	0.00100	0.00112		mg/L		112	38 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*97*		*15 - 141*
Tetrachloro-m-xylene	*96*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*94*		*33 - 120*
DCB Decachlorobiphenyl (Surr)	*87*		*33 - 120*

Lab Sample ID: LCSD 180-499599/5-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499606 — **Prep Batch: 499599**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
gamma-BHC (Lindane)	0.00100	0.000942		mg/L		94	62 - 120	1	16
Endrin	0.00100	0.00119		mg/L		119	62 - 138	2	15
Heptachlor	0.00100	0.000912		mg/L		91	53 - 119	2	16
Heptachlor epoxide	0.00100	0.000897		mg/L		90	63 - 125	4	17
Methoxychlor	0.00100	0.00110		mg/L		110	38 - 137	2	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*96*		*15 - 141*
Tetrachloro-m-xylene	*95*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*86*		*33 - 120*
DCB Decachlorobiphenyl (Surr)	*86*		*33 - 120*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LB2 180-499494/1-D
Matrix: Solid
Analysis Batch: 499606

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 499599

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00050		mg/L		07/15/25 21:24	07/16/25 10:27	1
Chlordane (technical)	ND		0.0050		mg/L		07/15/25 21:24	07/16/25 10:27	1
Endrin	ND		0.00050		mg/L		07/15/25 21:24	07/16/25 10:27	1
Heptachlor	ND		0.00050		mg/L		07/15/25 21:24	07/16/25 10:27	1
Heptachlor epoxide	ND		0.00050		mg/L		07/15/25 21:24	07/16/25 10:27	1
Methoxychlor	ND		0.00050		mg/L		07/15/25 21:24	07/16/25 10:27	1
Toxaphene	ND		0.040		mg/L		07/15/25 21:24	07/16/25 10:27	1

Surrogate	*LB2 %Recovery*	*LB2 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*100*		*15 - 141*	*07/15/25 21:24*	*07/16/25 10:27*	*1*
Tetrachloro-m-xylene	*100*		*15 - 141*	*07/15/25 21:24*	*07/16/25 10:27*	*1*
DCB Decachlorobiphenyl (Surr)	*98*		*33 - 120*	*07/15/25 21:24*	*07/16/25 10:27*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*33 - 120*	*07/15/25 21:24*	*07/16/25 10:27*	*1*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-499439/1-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		80		ug/Kg		07/13/25 22:01	07/15/25 10:58	1
2,4,5-T	ND		20		ug/Kg		07/13/25 22:01	07/15/25 10:58	1
Silvex (2,4,5-TP)	ND		20		ug/Kg		07/13/25 22:01	07/15/25 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*70*		*13 - 111*	*07/13/25 22:01*	*07/15/25 10:58*	*1*
2,4-Dichlorophenylacetic acid	*75*		*13 - 111*	*07/13/25 22:01*	*07/15/25 10:58*	*1*

Lab Sample ID: LCS 180-499439/2-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499439

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	400	393		ug/Kg		98	10 - 117
2,4,5-T	100	109		ug/Kg		109	11 - 129
Silvex (2,4,5-TP)	100	106		ug/Kg		106	10 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*92*		*13 - 111*
2,4-Dichlorophenylacetic acid	*100*		*13 - 111*

Lab Sample ID: LCSD 180-499439/3-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499439

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	400	393		ug/Kg		98	10 - 117	0	40

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 180-499439/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499528 — **Prep Batch: 499439**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-T			100	110		ug/Kg		110	11 - 129	1	40
Silvex (2,4,5-TP)			100	107		ug/Kg		107	10 - 125	1	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*92*		*13 - 111*
2,4-Dichlorophenylacetic acid	*100*		*13 - 111*

Lab Sample ID: MB 180-499596/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499692 — **Prep Batch: 499596**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.020		mg/L		07/15/25 21:09	07/17/25 08:39	10
Silvex (2,4,5-TP)	ND		0.0050		mg/L		07/15/25 21:09	07/17/25 08:39	10

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*44*		*13 - 111*	*07/15/25 21:09*	*07/17/25 08:39*	*10*
2,4-Dichlorophenylacetic acid	*46*		*13 - 111*	*07/15/25 21:09*	*07/17/25 08:39*	*10*

Lab Sample ID: LCS 180-499596/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499692 — **Prep Batch: 499596**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4-D			0.360	0.122		mg/L		34	10 - 117		
Silvex (2,4,5-TP)			0.0900	0.0304		mg/L		34	10 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*38*		*13 - 111*
2,4-Dichlorophenylacetic acid	*42*		*13 - 111*

Lab Sample ID: LCSD 180-499596/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499692 — **Prep Batch: 499596**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D			0.210	0.122		mg/L		58	10 - 117	0	40
Silvex (2,4,5-TP)			0.0525	0.0309		mg/L		59	10 - 125	2	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*50*		*13 - 111*
2,4-Dichlorophenylacetic acid	*54*		*13 - 111*

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LB2 180-499494/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 499692 — **Prep Batch: 499596**

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.020		mg/L		07/15/25 21:09	07/17/25 10:39	10
Silvex (2,4,5-TP)	ND		0.0050		mg/L		07/15/25 21:09	07/17/25 10:39	10

Surrogate	*LB2 %Recovery*	*LB2 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*35*		*13 - 111*	*07/15/25 21:09*	*07/17/25 10:39*	*10*
2,4-Dichlorophenylacetic acid	*38*		*13 - 111*	*07/15/25 21:09*	*07/17/25 10:39*	*10*

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-499529/8 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499529

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			07/15/25 09:37	1
Nitrate as N	ND		0.10		mg/L			07/15/25 09:37	1

Lab Sample ID: LCS 180-499529/9 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	49.4		mg/L		99	80 - 120
Nitrate as N	2.50	2.54		mg/L		101	80 - 120

Lab Sample ID: LB 180-499464/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499529

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			07/15/25 18:29	1
Nitrate as N	ND		0.10		mg/L			07/15/25 18:29	1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-672962/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 673513 — **Prep Batch: 672962**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		07/17/25 23:15	07/18/25 16:02	1

Lab Sample ID: LCS 410-672962/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 673513 — **Prep Batch: 672962**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	5.00	5.18		mg/L		104	83 - 119

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 410-672967/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 673513 — **Prep Batch: 672967**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		07/17/25 23:30	07/18/25 17:13	1

Lab Sample ID: LCS 410-672967/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 673513 — **Prep Batch: 672967**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	5.00	5.04		mg/L		101	83 - 119

Lab Sample ID: 410-232081-A-1-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 673513 — **Prep Batch: 672962**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND		5.00	5.18		mg/L		104	75 - 125

Lab Sample ID: 400-279089-B-1-F DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 673513 — **Prep Batch: 672967**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	ND		ND		mg/L		NC	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-672962/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 673540 — **Prep Batch: 672962**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.25		mg/L		07/17/25 23:15	07/18/25 18:09	1
Arsenic	ND		0.020		mg/L		07/17/25 23:15	07/18/25 18:09	1
Barium	ND		0.020		mg/L		07/17/25 23:15	07/18/25 18:09	1
Cadmium	ND		0.0050		mg/L		07/17/25 23:15	07/18/25 18:09	1
Chromium	ND		0.020		mg/L		07/17/25 23:15	07/18/25 18:09	1
Copper	ND		0.010		mg/L		07/17/25 23:15	07/18/25 18:09	1
Silver	ND		0.0050		mg/L		07/17/25 23:15	07/18/25 18:09	1
Molybdenum	ND		0.0050		mg/L		07/17/25 23:15	07/18/25 18:09	1
Nickel	ND		0.010		mg/L		07/17/25 23:15	07/18/25 18:09	1
Lead	ND		0.0050		mg/L		07/17/25 23:15	07/18/25 18:09	1
Antimony	ND		0.010		mg/L		07/17/25 23:15	07/18/25 18:09	1
Selenium	ND		0.010		mg/L		07/17/25 23:15	07/18/25 18:09	1
Zinc	ND		0.10		mg/L		07/17/25 23:15	07/18/25 18:09	1

Lab Sample ID: LCS 410-672962/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 673540 — **Prep Batch: 672962**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	50.0	52.0		mg/L		104	83 - 114

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-672962/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 673540 — **Prep Batch: 672962**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	5.00	5.21		mg/L		104	86 - 111
Barium	5.00	5.40		mg/L		108	86 - 114
Cadmium	0.500	0.543		mg/L		109	86 - 114
Chromium	5.00	5.14		mg/L		103	84 - 113
Copper	5.00	5.28		mg/L		106	86 - 111
Silver	0.500	0.535		mg/L		107	88 - 116
Molybdenum	0.500	0.538		mg/L		108	83 - 115
Nickel	5.00	5.17		mg/L		103	85 - 113
Lead	0.500	0.545		mg/L		109	86 - 114
Antimony	1.00	1.04		mg/L		104	85 - 115
Selenium	1.00	1.04		mg/L		104	86 - 111
Zinc	5.00	5.31		mg/L		106	88 - 112

Lab Sample ID: 410-232195-A-5-G MS ^10 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 673540 — **Prep Batch: 672962**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		10.0	9.66		mg/L		95	75 - 125
Arsenic	ND		5.00	4.43		mg/L		89	75 - 125
Barium	0.31		100	89.8		mg/L		89	75 - 125
Cadmium	ND		1.00	0.897		mg/L		89	75 - 125
Chromium	ND		5.00	4.66		mg/L		93	75 - 125
Copper	ND		5.00	4.64		mg/L		93	75 - 125
Silver	ND	FL	5.00	2.87	FL	mg/L		57	75 - 125
Molybdenum	ND		10.0	9.10		mg/L		91	81 - 125
Nickel	ND		5.00	4.60		mg/L		92	75 - 125
Lead	0.0075		5.00	4.64		mg/L		93	75 - 125
Antimony	ND		5.00	4.45		mg/L		89	75 - 125
Selenium	ND		1.00	0.847		mg/L		85	75 - 125
Zinc	ND		5.00	4.72		mg/L		94	75 - 125

Lab Sample ID: 410-232195-A-5-H MSD ^10 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 673540 — **Prep Batch: 672962**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		10.0	9.33		mg/L		91	75 - 125	4	20
Arsenic	ND		5.00	4.49		mg/L		90	75 - 125	1	20
Barium	0.31		100	90.9		mg/L		91	75 - 125	1	20
Cadmium	ND		1.00	0.889		mg/L		89	75 - 125	1	20
Chromium	ND		5.00	4.64		mg/L		93	75 - 125	0	20
Copper	ND		5.00	4.59		mg/L		92	75 - 125	1	20
Silver	ND	FL	5.00	2.90	FL	mg/L		58	75 - 125	1	20
Molybdenum	ND		10.0	9.09		mg/L		91	81 - 125	0	20
Nickel	ND		5.00	4.51		mg/L		90	75 - 125	2	20
Lead	0.0075		5.00	4.62		mg/L		92	75 - 125	0	20
Antimony	ND		5.00	4.37		mg/L		87	75 - 125	2	20
Selenium	ND		1.00	0.910		mg/L		91	75 - 125	7	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-232195-A-5-H MSD ^10 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 673540 — **Prep Batch: 672962**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Zinc	ND		5.00	4.66		mg/L		93	75 - 125	1	20

Lab Sample ID: 410-232195-A-5-F DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 673540 — **Prep Batch: 672962**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	ND		ND		mg/L		NC	20
Arsenic	ND		ND		mg/L		NC	20
Barium	0.31		0.297		mg/L		4	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Copper	ND		ND		mg/L		NC	20
Silver	ND	FL	ND		mg/L		NC	20
Molybdenum	ND		ND		mg/L		NC	20
Nickel	ND		ND		mg/L		NC	20
Lead	0.0075		0.00733		mg/L		2	20
Antimony	ND		ND		mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20
Zinc	ND		ND		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-672963/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674502 — **Prep Batch: 672963**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		07/20/25 23:55	07/22/25 06:45	1

Lab Sample ID: LCS 410-672963/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674502 — **Prep Batch: 672963**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00100	0.00105		mg/L		105	80 - 120

Lab Sample ID: 410-232195-A-5-K MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 674502 — **Prep Batch: 672963**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.0200	0.0182		mg/L		91	80 - 120

Lab Sample ID: 410-232195-A-5-L MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 674502 — **Prep Batch: 672963**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.0200	0.0175		mg/L		87	80 - 120	4	20

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 410-232195-A-5-J DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 674502 — **Prep Batch: 672963**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/L		NC	20

Method: 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-674946/1 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Flashpoint	127	133		Degrees F		105	90 - 110

Lab Sample ID: LCSD 410-674946/2 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674946

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	127	133		Degrees F		105	90 - 110	0	4

Method: 350.1_GD - Ammonia by Gas Diffusion

Lab Sample ID: MB 180-499804/17 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499804

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			07/18/25 09:20	1

Lab Sample ID: LCS 180-499804/18 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499804

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	0.500	0.531		mg/L		106	90 - 110

Lab Sample ID: 180-193180-G-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499804

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	ND		0.500	0.474		mg/L		95	90 - 110

Lab Sample ID: 180-193180-G-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499804

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia, distilled	ND		0.500	0.539		mg/L		108	90 - 110	13	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

Method: 410.4 - COD

Lab Sample ID: MB 410-674526/4
Matrix: Solid
Analysis Batch: 674526

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75		mg/L			07/22/25 09:22	1

Lab Sample ID: LCS 410-674526/5
Matrix: Solid
Analysis Batch: 674526

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	500	491		mg/L		98	90 - 110

Lab Sample ID: 410-232646-L-2 MS
Matrix: Solid
Analysis Batch: 674526

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	880		2000	2700		mg/L		91	90 - 110

Lab Sample ID: 410-232646-L-2 DU
Matrix: Solid
Analysis Batch: 674526

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	880		894		mg/L		1	10

Lab Sample ID: LB 410-672588/1-A
Matrix: Solid
Analysis Batch: 674526

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75		mg/L			07/22/25 09:22	1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-675953/1-A
Matrix: Solid
Analysis Batch: 676678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 675953

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		90		mg/Kg		07/24/25 17:12	07/26/25 16:22	1

Lab Sample ID: LCS 410-675953/25-A
Matrix: Solid
Analysis Batch: 676678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 675953

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	61.5	J *+	mg/Kg		6	0 - 5.14

Method: 9012 - Cyanide, Reactive (Continued)

Lab Sample ID: 410-232133-H-4-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676678 — **Prep Batch: 675953**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	ND	*+	1030	ND		mg/Kg		5	0 - 44

Lab Sample ID: 410-232133-H-4-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676678 — **Prep Batch: 675953**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Reactive	ND	*+	978	ND		mg/Kg		4	0 - 44	8	11

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-675953/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676081 — **Prep Batch: 675953**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160		mg/Kg		07/24/25 17:12	07/24/25 22:16	1

Lab Sample ID: LCS 410-675953/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676081 — **Prep Batch: 675953**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	539	391		mg/Kg		73	54 - 104

Lab Sample ID: 410-232133-H-4-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676081 — **Prep Batch: 675953**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	ND		543	384		mg/Kg		71	62 - 104

Lab Sample ID: 410-232133-H-4-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676081 — **Prep Batch: 675953**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide, Reactive	ND		541	392		mg/Kg		73	62 - 104	2	21

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-664000/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 664022 — **Prep Batch: 664000**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		30		mg/Kg		07/16/25 10:20	07/16/25 11:16	1

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 240-664000/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 664022 — **Prep Batch: 664000**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	77.2	78.5		mg/Kg		102	56 - 120

Lab Sample ID: 180-193023-1 MS — **Client Sample ID: 250710012-07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 664022 — **Prep Batch: 664000**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	ND		220	178		mg/Kg	☼	57	10 - 143

Lab Sample ID: 180-193023-1 MSD — **Client Sample ID: 250710012-07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 664022 — **Prep Batch: 664000**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND		218	199		mg/Kg	☼	67	10 - 143	11	25

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-499567/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499591 — **Prep Batch: 499567**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50		mg/Kg		07/15/25 13:06	07/15/25 15:50	1

Lab Sample ID: HLCS 180-499567/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499591 — **Prep Batch: 499567**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.263		mg/Kg		105	90 - 110

Lab Sample ID: LCS 180-499567/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499591 — **Prep Batch: 499567**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	26.0	26.6		mg/Kg		102	17 - 163

Lab Sample ID: LLCS 180-499567/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499592 — **Prep Batch: 499567**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0487	^+	mg/Kg		97	90 - 110

Method: EPA 9014 - Cyanide (Continued)

Lab Sample ID: 180-193042-B-1-I MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499591 — **Prep Batch: 499567**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND	FL	2.22	1.42	FL	mg/Kg	☼	64	75 - 125

Lab Sample ID: 180-193042-B-1-J MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499591 — **Prep Batch: 499567**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	FL	2.26	1.49	FL	mg/Kg	☼	66	75 - 125	5	20

Lab Sample ID: 180-193225-F-1-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 500132 — **Prep Batch: 500098**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND	FL F2	200	13.6	FL	ug/L		7	75 - 125

Lab Sample ID: 180-193225-F-1-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 500132 — **Prep Batch: 500098**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	FL F2	200	20.1	FL F2	ug/L		10	75 - 125	39	20

Lab Sample ID: 180-193225-F-1-F DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 500132 — **Prep Batch: 500098**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	ND	FL F2	ND		ug/L		NC	20

Lab Sample ID: LB 180-499464/1-C — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 500132 — **Prep Batch: 500098**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		07/23/25 11:21	07/23/25 15:52	1

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-499588/1 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

Method: EPA 9040C - pH (Continued)

Lab Sample ID: LB 180-499464/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499588

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	6.5		0.1		SU			07/15/25 16:26	1
Temperature	25.9		0.1		Degrees C			07/15/25 16:26	1

Lab Sample ID: 180-193023-1 DU — **Client Sample ID: 250710012-07**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499588

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	11.7		11.7		SU		0	2
Temperature	25.9	!	25.9		Degrees C		0	5

Method: EPA 9095B - Paint Filter

Lab Sample ID: 180-193023-1 DU — **Client Sample ID: 250710012-07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499844

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Free Liquid	CNF		CNF		NONE		NC	20

Method: SM 2540B - Total Solids

Lab Sample ID: MB 180-499628/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499628

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			07/16/25 10:07	1

Lab Sample ID: MB 180-499713/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			07/17/25 10:10	1

Lab Sample ID: LCS 180-499713/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Solids	252	216		mg/L		86	85 - 115

Lab Sample ID: LCSD 180-499713/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499713

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Solids	252	220		mg/L		87	85 - 115	2	20

Method: SM 2540B - Total Solids (Continued)

Lab Sample ID: LB 180-499464/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499628

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			07/16/25 10:07	1

Method: SM 2540E - Solids, Volatile and Fixed (VS)

Lab Sample ID: MB 180-499712/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			07/16/25 10:07	1

Lab Sample ID: MB 180-499790/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			07/17/25 10:10	1

Lab Sample ID: LB 180-499464/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499712

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			07/16/25 10:07	1

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-192915-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499491

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	87		87.9		%		1	10
Total Volatile Solids	7.0		7.22		%		3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

GC/MS VOA

Leach Batch: 673587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	1311	
410-231517-A-1-A MS	Matrix Spike	TCLP	Solid	1311	
410-231517-A-1-A MSD	Matrix Spike Duplicate	TCLP	Solid	1311	

Analysis Batch: 675427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	8260D	673587
MB 410-675427/8	Method Blank	Total/NA	Solid	8260D	
LCS 410-675427/5	Lab Control Sample	Total/NA	Solid	8260D	
410-231517-A-1-A MS	Matrix Spike	TCLP	Solid	8260D	673587
410-231517-A-1-A MSD	Matrix Spike Duplicate	TCLP	Solid	8260D	673587

GC/MS Semi VOA

Leach Batch: 499494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	EPA 1311	
LB2 180-499494/1-C	Method Blank	TCLP	Solid	EPA 1311	

Prep Batch: 499512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	3541	
MB 180-499512/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-499512/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-499512/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Analysis Batch: 499533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	EPA 8270E	499512
MB 180-499512/1-A	Method Blank	Total/NA	Solid	EPA 8270E	499512
LCS 180-499512/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	499512
LCSD 180-499512/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	499512

Prep Batch: 499597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	3510C	499494
LB2 180-499494/1-C	Method Blank	TCLP	Solid	3510C	499494
MB 180-499597/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-499597/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-499597/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 499618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	EPA 8270E	499597
LB2 180-499494/1-C	Method Blank	TCLP	Solid	EPA 8270E	499597
MB 180-499597/1-A	Method Blank	Total/NA	Solid	EPA 8270E	499597
LCS 180-499597/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	499597
LCSD 180-499597/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	499597

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193023-1
SDG: 250710012

GC Semi VOA

Prep Batch: 499439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	8151A	
MB 180-499439/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-499439/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-499439/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Leach Batch: 499494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	EPA 1311	
LB2 180-499494/1-B	Method Blank	TCLP	Solid	EPA 1311	
LB2 180-499494/1-D	Method Blank	TCLP	Solid	EPA 1311	

Analysis Batch: 499528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	EPA 8151A	499439
MB 180-499439/1-A	Method Blank	Total/NA	Solid	EPA 8151A	499439
LCS 180-499439/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	499439
LCSD 180-499439/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	499439

Prep Batch: 499582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	3541	
MB 180-499582/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-499582/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-499582/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Prep Batch: 499596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	8151A	499494
LB2 180-499494/1-B	Method Blank	TCLP	Solid	8151A	499494
MB 180-499596/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-499596/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-499596/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Prep Batch: 499599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	3510C	499494
LB2 180-499494/1-D	Method Blank	TCLP	Solid	3510C	499494
MB 180-499599/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-499599/4-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-499599/5-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 499606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	EPA 8081B	499599
180-193023-1	250710012-07	Total/NA	Solid	EPA 8081B	499582
LB2 180-499494/1-D	Method Blank	TCLP	Solid	EPA 8081B	499599
MB 180-499582/1-A	Method Blank	Total/NA	Solid	EPA 8081B	499582
MB 180-499599/1-A	Method Blank	Total/NA	Solid	EPA 8081B	499599
LCS 180-499582/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	499582
LCS 180-499599/4-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	499599
LCSD 180-499582/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	499582

GC Semi VOA (Continued)

Analysis Batch: 499606 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 180-499599/5-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	499599

Analysis Batch: 499692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	EPA 8151A	499598
LB2 180-499494/1-B	Method Blank	TCLP	Solid	EPA 8151A	499596
MB 180-499596/1-A	Method Blank	Total/NA	Solid	EPA 8151A	499596
LCS 180-499596/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	499596
LCSD 180-499596/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	499596

HPLC/IC

Leach Batch: 499464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	D3987-85	
LB 180-499464/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 499529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	EPA 9056A	499464
LB 180-499464/1-A	Method Blank	ASTM Leach	Solid	EPA 9056A	499464
MB 180-499529/8	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-499529/9	Lab Control Sample	Total/NA	Solid	EPA 9056A	

Metals

Leach Batch: 671956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-232195-A-5-G MS ^10	Matrix Spike	TCLP	Solid	1311	
410-232195-A-5-H MSD ^10	Matrix Spike Duplicate	TCLP	Solid	1311	
410-232195-A-5-K MS	Matrix Spike	TCLP	Solid	1311	
410-232195-A-5-L MSD	Matrix Spike Duplicate	TCLP	Solid	1311	
410-232195-A-5-F DU	Duplicate	TCLP	Solid	1311	
410-232195-A-5-J DU	Duplicate	TCLP	Solid	1311	

Leach Batch: 671966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	1311	
400-279089-B-1-F DU	Duplicate	TCLP	Solid	1311	

Leach Batch: 672223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-232081-A-1-G MS	Matrix Spike	TCLP	Solid	1311	

Prep Batch: 672962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	3005A	671968
MB 410-672962/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 410-672962/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
410-232081-A-1-G MS	Matrix Spike	TCLP	Solid	3005A	672223
410-232195-A-5-G MS ^10	Matrix Spike	TCLP	Solid	3005A	671956
410-232195-A-5-H MSD ^10	Matrix Spike Duplicate	TCLP	Solid	3005A	671968

Metals (Continued)

Prep Batch: 672962 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-232195-A-5-F DU	Duplicate	TCLP	Solid	3005A	671956

Prep Batch: 672963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	7470A	671966
MB 410-672963/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 410-672963/2-A	Lab Control Sample	Total/NA	Solid	7470A	
410-232195-A-5-K MS	Matrix Spike	TCLP	Solid	7470A	671956
410-232195-A-5-L MSD	Matrix Spike Duplicate	TCLP	Solid	7470A	871956
410-232195-A-5-J DU	Duplicate	TCLP	Solid	7470A	671956

Prep Batch: 672967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-672967/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 410-672967/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
400-279069-B-1-F DU	Duplicate	TCLP	Solid	3005A	671966

Analysis Batch: 673513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-193023-1	250710012-07	TCLP	Solid	6010D	672962
MB 410-672962/1-A	Method Blank	Total Recoverable	Solid	6010D	672962
MB 410-672967/1-A	Method Blank	Total Recoverable	Solid	6010D	672967
LCS 410-672962/2-A	Lab Control Sample	Total Recoverable	Solid	6010D	672962
LCS 410-672967/2-A	Lab Control Sample	Total Recoverable	Solid	6010D	672967
410-232061-A-1-G MS	Matrix Spike	TCLP	Solid	6010D	672962
400-279069-B-1-F DU	Duplicate	TCLP	Solid	6010D	672967

Analysis Batch: 673540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-193023-1	250710012-07	TCLP	Solid	6020B	672962
MB 410-672962/1-A	Method Blank	Total Recoverable	Solid	6020B	672962
LCS 410-672962/2-A	Lab Control Sample	Total Recoverable	Solid	6020B	672962
410-232195-A-5-G MS ^10	Matrix Spike	TCLP	Solid	6020B	672962
410-232195-A-5-H MSD ^10	Matrix Spike Duplicate	TCLP	Solid	6020B	672962
410-232195-A-5-F DU	Duplicate	TCLP	Solid	6020B	672962

Analysis Batch: 674502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	TCLP	Solid	7470A	672963
MB 410-672963/1-A	Method Blank	Total/NA	Solid	7470A	672963
LCS 410-672963/2-A	Lab Control Sample	Total/NA	Solid	7470A	672963
410-232195-A-5-K MS	Matrix Spike	TCLP	Solid	7470A	672963
410-232195-A-5-L MSD	Matrix Spike Duplicate	TCLP	Solid	7470A	672963
410-232195-A-5-J DU	Duplicate	TCLP	Solid	7470A	672963

General Chemistry

Leach Batch: 499464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	D3987-85	
LB 180-499464/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

General Chemistry (Continued)

Leach Batch: 499464 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-499464/1-C	Method Blank	ASTM Leach	Solid	D3987-85	
180-193023-1 DU	250710012-07	ASTM Leach	Solid	D3987-85	

Analysis Batch: 499491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	SM 2540G	
180-192915-A-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

Prep Batch: 499567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	9010C	
MB 180-499567/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-499567/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-499567/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-499567/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-193042-B-1-I MS	Matrix Spike	Total/NA	Solid	9010C	
180-193042-B-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	9010C	

Analysis Batch: 499588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	EPA 9040C	499464
LB 180-499464/1-A	Method Blank	ASTM Leach	Solid	EPA 9040C	499464
LCS 180-499588/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
180-193023-1 DU	250710012-07	ASTM Leach	Solid	EPA 9040C	499464

Analysis Batch: 499591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	EPA 9014	499567
MB 180-499567/4-A	Method Blank	Total/NA	Solid	EPA 9014	499567
HLCS 180-499567/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499567
LCS 180-499567/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499567
180-193042-B-1-I MS	Matrix Spike	Total/NA	Solid	EPA 9014	499567
180-193042-B-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9014	499567

Analysis Batch: 499592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 180-499567/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499567

Analysis Batch: 499628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-499464/1-A	Method Blank	ASTM Leach	Solid	SM 2540B	499464
MB 180-499628/1	Method Blank	Total/NA	Solid	SM 2540B	

Analysis Batch: 499712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-499464/1-A	Method Blank	ASTM Leach	Solid	SM 2540E	499464
MB 180-499712/1	Method Blank	Total/NA	Solid	SM 2540E	

Analysis Batch: 499713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	SM 2540B	499464

General Chemistry (Continued)

Analysis Batch: 499713 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-499713/1	Method Blank	Total/NA	Solid	SM 2540B	
LCS 180-499713/2	Lab Control Sample	Total/NA	Solid	SM 2540B	
LCSD 180-499713/3	Lab Control Sample Dup	Total/NA	Solid	SM 2540B	

Analysis Batch: 499790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	SM 2540E	499464
MB 180-499790/1	Method Blank	Total/NA	Solid	SM 2540E	

Analysis Batch: 499804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	350.1_GD	499464
MB 180-499804/17	Method Blank	Total/NA	Solid	350.1_GD	
LCS 180-499804/18	Lab Control Sample	Total/NA	Solid	350.1_GD	
180-193180-G-1 MS	Matrix Spike	Total/NA	Solid	350.1_GD	
180-193180-G-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	350.1_GD	

Analysis Batch: 499844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	EPA 9095B	
180-193023-1 DU	250710012-07	Total/NA	Solid	EPA 9095B	

Prep Batch: 500098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	9010C	499464
LB 180-499464/1-C	Method Blank	ASTM Leach	Solid	9010C	499464
180-193225-F-1-G MS	Matrix Spike	Total/NA	Solid	9010C	
180-193225-F-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	9010C	
180-193225-F-1-F DU	Duplicate	Total/NA	Solid	9010C	

Analysis Batch: 500132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	EPA 9014	500098
LB 180-499464/1-C	Method Blank	ASTM Leach	Solid	EPA 9014	500098
180-193225-F-1-G MS	Matrix Spike	Total/NA	Solid	EPA 9014	500098
180-193225-F-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9014	500098
180-193225-F-1-F DU	Duplicate	Total/NA	Solid	EPA 9014	500098

Prep Batch: 664000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	9030B	
MB 240-664000/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 240-664000/2-A	Lab Control Sample	Total/NA	Solid	9030B	
180-193023-1 MS	250710012-07	Total/NA	Solid	9030B	
180-193023-1 MSD	250710012-07	Total/NA	Solid	9030B	

Analysis Batch: 664022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	9034	664000
MB 240-664000/1-A	Method Blank	Total/NA	Solid	9034	664000
LCS 240-664000/2-A	Lab Control Sample	Total/NA	Solid	9034	664000

General Chemistry (Continued)

Analysis Batch: 664022 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1 MS	250710012-07	Total/NA	Solid	9034	664000
180-193023-1 MSD	250710012-07	Total/NA	Solid	9034	664000

Leach Batch: 672588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	D3987-85	
LB 410-672588/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 674526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	ASTM Leach	Solid	410.4	672588
LB 410-672588/1-A	Method Blank	ASTM Leach	Solid	410.4	672588
MB 410-674526/4	Method Blank	Total/NA	Solid	410.4	
LCS 410-674526/5	Lab Control Sample	Total/NA	Solid	410.4	
410-232646-L-2 MS	Matrix Spike	Total/NA	Solid	410.4	
410-232646-L-2 DU	Duplicate	Total/NA	Solid	410.4	

Analysis Batch: 674946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	1010B	
LCS 410-674946/1	Lab Control Sample	Total/NA	Solid	1010B	
LCSD 410-674946/2	Lab Control Sample Dup	Total/NA	Solid	1010B	

Prep Batch: 675953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	7.3.3	
MB 410-675953/1-A	Method Blank	Total/NA	Solid	7.3.3	
LCS 410-675953/25-A	Lab Control Sample	Total/NA	Solid	7.3.3	
LCS 410-675953/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	
410-232133-H-4-B MS	Matrix Spike	Total/NA	Solid	7.3.3	
410-232133-H-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.3	
410-232133-H-4-D MS	Matrix Spike	Total/NA	Solid	7.3.3	
410-232133-H-4-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.3	

Analysis Batch: 676081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	9034	675953
MB 410-675953/1-A	Method Blank	Total/NA	Solid	9034	675953
LCS 410-675953/2-A	Lab Control Sample	Total/NA	Solid	9034	675953
410-232133-H-4-B MS	Matrix Spike	Total/NA	Solid	9034	675953
410-232133-H-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	9034	675953

Analysis Batch: 676678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193023-1	250710012-07	Total/NA	Solid	9012	675953
MB 410-675953/1-A	Method Blank	Total/NA	Solid	9012	675953
LCS 410-675953/25-A	Lab Control Sample	Total/NA	Solid	9012	675953
410-232133-H-4-D MS	Matrix Spike	Total/NA	Solid	9012	675953
410-232133-H-4-E MSD	Matrix Spike Duplicate	Total/NA	Solid	9012	675953

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250710012**

Additional Information : Quarterly Limed Sludge

Sample composited on July 10 from grabs collected on July 2, July 6, July 7, July 8, July 9, July 10.

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: See attached Parameter List	See attached Parameter List	See attached Parameter List	See attached Parameter List		
							Number of Containers					
250710012-07	7/10/25	1010	S	N	C	Always maintain sample/extract at	2	4	2	1		
						25°C when reading any pH result.						
						Solids must be analyzed by 2540G.						
						All methods must be accredited by						
						PADEP or NELAC.						
						Email a copy of LIMS login with signed						
						COC as soon as possible after receipt.						
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-193023 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	7/11/25	0935	[signature]	EUROFINS	7-11-25	945
[signature]	EPTAE	7-11-25	12:10	[signature]	EPTAE	7/11/25	1210
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: [initials] Date: 7/11/25

Supervisor Review: Initials: [initials] Date: 7-10-25

Contract Lab ONLY Quarterly Analysis, includes **Unlimed Sludge** (one quarter per year)

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM , LIMED SLUDGE & UNLIMED SLUDGE- ONE QUARTER PER YEAR (all sent to outside lab)			
COMPOSITE (2 Clear Quarts + 4 Amber half pints + 2 pints)			
7 days of a Grab sample to generate a Composite* (minimum 6 grabs) Each sample matrix is analyzed for all parameters listed. ---------- NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlimed sludge is included, analyses are performed by contract laboratory(s) only- **see Residuals for which quarter.** **Check reporting limit requirments.**	Quarterly	ASTM EXTRACTION (LIQUID) pH(SW-846 9040C) pH Temp(SW-846 9040C) Total Solids Total Volatile Solids Nitrate-Nitrogen Cyanide, Total COD NH3-N Total Sulfates TCLP EXTRACTION (LIQUID) TCLP METALS Aluminum Arsenic Barium Cadmium Chromium Lead Mercury Selenium Antimony Boron Copper Molybdenum Nickel Zinc Silver Herbicides Pesticides Chlordane Toxaphene 8270 BNA 8260 Volatile Organics (ZHE) MISCELLANEOUS (SOLID) Herbicides Pesticides Heptachlor/Hep. Epoxide Chlordane Toxaphene Cyanide, Total Total Sulfide Paint Filter Test Ignitability 8270 BNA Total Solids (SM2540G) Total Volatile Solids (SM2540G)# COMPOSITE (Half Pint) Lancaster Lab Reactive Cyanide Reactive Sulfide # Not logged in separately from Solids, Total	Laboratory

Red indicates analyses performed by a contract laboratory

SEND 2 FULL CLEAR QUARTS + 4 AMBER 1/2 PINTS + 2 PINTS + ONE HALF PINT OF COMPOSITE

Login ASTM as test group "ASTM Extraction (liquid)"

Alcosan #20 -0.8

J6	2.3	1.5
J7	3.6	2.8

180-193023 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins Environment Tes

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-542080.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP Pennsylvania		Job #: 180-193023-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 7/24/2025			
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:

Other: N/A

E45

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wewater, Sesolid, Omwastewater, BTeTissue, AeAir)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030BSulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
250710012-07 (180-193023-1)	7/10/25	10:10 Eastern	G	Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	7/14/25 1700			7/15/25 1000	EC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 10/10/2024 7/28/2025

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Eurofins Site Name _____ Cooler unpacked by: NS
Cooler Received on 7/15/25 Opened on 7/15/25
FedEx 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
Receipt After-hours Drop-off Date/Time _____ Storage Location _____
Eurofins Cooler # 15 Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN # _____ (CF _____ °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2 Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
-Were tamper/custody seals intact and uncompromised? Yes No NA
3 Shippers' packing slip attached to the cooler(s)? Yes No
4 Did custody papers accompany the sample(s)? Yes No
5 Were the custody papers relinquished & signed in the appropriate place? Yes No
6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7 Did all bottles arrive in good condition (Unbroken)? Yes No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
9 For each sample, does the COC specify preservatives (Y/N) # of containers (Y/N), and sample type of grab/comp (Y/N)?
10 Were correct bottle(s) used for the test(s) indicated? Yes No
11 Sufficient quantity received to perform indicated analyses? Yes No
12 Are these work share samples and all listed on the COC? Yes No
If yes, Questions 13-17 have been checked at the originating laboratory
13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC463162
14 Were VOAs on the COC? Yes No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this Yes No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17 Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:
Labels Verified by

19 SAMPLE CONDITION
Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container
Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION
Sample(s) _____ were further preserved in the laboratory
Time preserved _____ Preservative(s) added/Lot number(s) _____
VOA Sample Preservation Date/Time VOAs Frozen _____

Login # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 17	2.0	2.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	0.7	0.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	13.7	13.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	1.0	1.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	21.5	21.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

ORIGIN ID:AGCA (412) 983-7530
SAMPLE RECEIVING DEPARTMENT
EUROFINS ENVIRO TESTING PITT N E
301 ALPHA DRIVE

PITTSBURGH PA 152382907
UNITED STATES US

SHIP DATE 14JUL25
ACTWGT 60.00 LB MAN
CAD 0522321/CAFE3907

BILL SENDER

Part # 159469-494 RRDB2 EXP 04/26

TO SHIPPING/RECEIVING
EUROFINS ENVIRONMENT TESTING NORTH
180 S. VAN BUREN AVENUE

BARBERTON OH 44203
(330) 497-9396
PO: YES REF: S180-116477

FedEx Express

2 of 4
MPS# 0263 4642 5777 5232
Mstr# 4642 5777 5221

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

0201

64 CAKA

44203
OH-US CLE

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shall	Carrier Tracking No(s): N/A	COC No: 180-542078.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shall.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-193023-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 7/24/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	410.4/ASTM_LEACH_N*	8260D/1311_2TCLP Volatiles + Naphthalene	6020B/1311T_M(MOD) TCLP Quarterly Metals List	7470A/1311T_HgMercury	6010D/1311T_M(MOD) TCLP Boron	9012_ReactiveCN/7.3.3	9034_ReactiveS/7.3.4	1010Ignitability, Pensky-Martens Closed-Cup	Total Number of containers	Special Instructions/Note:
			Preservation Code:													
250710012-07 (180-193023-1)	7/10/25	10:10 Eastern	G	Solid			X	X	X	X	X	X	X	X	3	, DO NOT Overdilute; low limits required

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 7-14-25 1300	Company EPIHAE	Received by:	Date/Time: 7-14-25 15:15	Company ELLE
Relinquished by:	Date/Time: 7-14-25 20:50	Company ELLE	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 7/14/25 2040	Company ETLEST

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 25.6 - 25.6

Ver: 10/10/2024

7/28/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-193023-1
SDG Number: 250710012

Login Number: 193023
List Number: 1
Creator: Brown, Shall

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-193023-1
SDG Number: 250710012

Login Number: 193023
List Number: 2
Creator: Ballard, Megan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/15/25 12:30 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250710013 **Sample Date:** 7/10/2025

Sample ID Number: 250710013-01 **Sample Type:** COMPOSITE

Customer Sample Number: METALS COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
Thallium	Contract Lab	EurofinsLancaster	7/29/2025	<0.31	mg/kg dry	0.31		
Total Sulfur	Contract Lab	EurofinsLancaster	7/28/2025	7900	mg/kg dry	150		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/14/2025	28	%	0.50		
Metals								
Antimony	Contract Lab	EurofinsLancaster	7/29/2025	2.4	mg/kg dry	0.61		
Arsenic	Contract Lab	EurofinsLancaster	7/29/2025	12	mg/kg dry	1.2		
Barium	Contract Lab	EurofinsLancaster	7/29/2025	450	mg/kg dry	1.2		
Beryllium	Contract Lab	EurofinsLancaster	7/29/2025	1.2	mg/kg dry	0.31		
Boron	Contract Lab	EurofinsLancaster	7/28/2025	<61	mg/kg dry	61		
Cadmium	Contract Lab	EurofinsLancaster	7/29/2025	1.4	mg/kg dry	0.31		
Chromium	Contract Lab	EurofinsLancaster	7/29/2025	61	mg/kg dry	1.2		
Copper	Contract Lab	EurofinsLancaster	7/29/2025	270	mg/kg dry	1.2		
Lead	Contract Lab	EurofinsLancaster	7/29/2025	72	mg/kg dry	0.61		
Mercury, Total	Contract Lab	EurofinsLancaster	7/23/2025	0.80	mg/kg dry	0.21		
Molybdenum	Contract Lab	EurofinsLancaster	7/29/2025	14	mg/kg dry	0.61		

Printed Date
Monday, August 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250710013 **Sample Date:** 7/10/2025

Sample ID Number: 250710013-01 **Sample Type:** COMPOSITE

Customer Sample Number: METALS COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Nickel	Contract Lab	EurofinsLancaster	7/29/2025	39	mg/kg dry	1.2		
Selenium	Contract Lab	EurofinsLancaster	7/29/2025	4.1	mg/kg dry	1.2		
Silver	Contract Lab	EurofinsLancaster	7/29/2025	2.1	mg/kg dry	0.31		
Sodium	Contract Lab	EurofinsLancaster	7/29/2025	530	mg/kg dry	150		
Zinc	Contract Lab	EurofinsLancaster	7/29/2025	710	mg/kg dry	92		

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on July 10 from grabs collected on July 2, July 6, July 7, July 8, July 9, July 10.

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

8-11-25

Date

Printed Date
Monday, August 11, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 7/30/2025 1:58:49 AM

JOB DESCRIPTION

Quarterly Limed Sludge
250710013

JOB NUMBER

180-193019-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shall Brown, Project Manager II
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(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 15
Chain of Custody 16
Receipt Checklists 20

Job Narrative
180-193019-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 7/11/2025 12:10 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5°C and 2.8°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
FH	MS and/or MSD recovery above control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-193019-1	250710013-01	Solid	07/10/25 10:10	07/11/25 12:10

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7471B	Mercury (CVAA)	SW846	ELLE
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
7471B	Preparation, Mercury	SW846	ELLE

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Client Sample ID: 250710013-01 **Lab Sample ID: 180-193019-1**
Date Collected: 07/10/25 10:10 **Matrix: Solid**
Date Received: 07/11/25 12:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			499491	07/14/25 11:27	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250710013-01 **Lab Sample ID: 180-193019-1**
Date Collected: 07/10/25 10:10 **Matrix: Solid**
Date Received: 07/11/25 12:10 **Percent Solids: 28.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.15 g	100 mL	674917	07/27/25 22:00	UAMX	ELLE
Total/NA	Analysis	6010D		1			677394	07/28/25 18:52	T8CQ	ELLE
	Instrument ID: T75 - 27278									
Total/NA	Prep	3050B			1.15 g	100 mL	674917	07/27/25 22:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			677999	07/29/25 16:59	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	7471B			0.61 g	100 mL	675101	07/23/25 10:30	HNC4	ELLE
Total/NA	Analysis	7471B		1			675416	07/23/25 14:19	IJ3I	ELLE
	Instrument ID: M10 – 31620									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Analysis
  - ELS = Edwin Shireman

Lab: ELLE
- Batch Type: Prep
  - HNC4 = Mindy Schantzenbach
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - IJ3I = Elizabeth Brittingham
  - LHF4 = Diamond Boyer
  - T8CQ = Sera Bargo

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Client Sample ID: 250710013-01
Date Collected: 07/10/25 10:10
Date Received: 07/11/25 12:10

Lab Sample ID: 180-193019-1
Matrix: Solid
Percent Solids: 28.4

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		61		mg/Kg	☼	07/27/25 22:00	07/28/25 18:52	1
Sulfur	7900		150		mg/Kg	☼	07/27/25 22:00	07/28/25 18:52	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.4		0.61		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Arsenic	12		1.2		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Barium	450		1.2		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Beryllium	1.2		0.31		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Cadmium	1.4		0.31		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Chromium	61		1.2		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Copper	270		1.2		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Lead	72		0.61		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Molybdenum	14		0.61		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Nickel	39		1.2		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Selenium	4.1		1.2		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Silver	2.1		0.31		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Sodium	530		150		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Thallium	ND		0.31		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2
Zinc	710		92		mg/Kg	☼	07/27/25 22:00	07/29/25 16:59	2

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.80		0.21		mg/Kg	☼	07/23/25 10:30	07/23/25 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	28		0.50		%			07/14/25 11:27	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-674917/1-A
Matrix: Solid
Analysis Batch: 677394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674917

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		20		mg/Kg		07/27/25 22:00	07/28/25 18:19	1
Sulfur	ND		50		mg/Kg		07/27/25 22:00	07/28/25 18:19	1

Lab Sample ID: LCS 410-674917/2-A
Matrix: Solid
Analysis Batch: 677394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674917

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	50.0	47.4		mg/Kg		95	80 - 120
Sulfur	500	494		mg/Kg		99	89 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-674917/1-A
Matrix: Solid
Analysis Batch: 677999

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674917

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Arsenic	ND		0.40		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Barium	ND		0.40		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Beryllium	ND		0.10		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Cadmium	ND		0.10		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Chromium	ND		0.40		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Copper	ND		0.40		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Lead	ND		0.20		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Molybdenum	ND		0.20		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Nickel	ND		0.40		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Selenium	ND		0.40		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Silver	ND		0.10		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Sodium	ND		50		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Thallium	ND		0.10		mg/Kg		07/27/25 22:00	07/29/25 16:34	2
Zinc	ND		30		mg/Kg		07/27/25 22:00	07/29/25 16:34	2

Lab Sample ID: LCS 410-674917/2-A
Matrix: Solid
Analysis Batch: 677999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674917

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	10.0	10.9		mg/Kg		109	83 - 117
Arsenic	50.0	52.5		mg/Kg		105	84 - 114
Barium	50.0	55.6		mg/Kg		111	85 - 118
Beryllium	5.00	5.28		mg/Kg		106	74 - 120
Cadmium	5.00	5.44		mg/Kg		109	85 - 117
Chromium	50.0	54.0		mg/Kg		108	83 - 116
Copper	50.0	52.8		mg/Kg		106	83 - 115
Lead	5.00	5.37		mg/Kg		107	85 - 119
Molybdenum	5.00	5.49		mg/Kg		110	83 - 119
Nickel	50.0	53.2		mg/Kg		106	84 - 116

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-674917/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 677999 — **Prep Batch: 674917**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	10.0	10.4		mg/Kg		104	83 - 115
Silver	5.00	5.51		mg/Kg		110	87 - 119
Sodium	500	528		mg/Kg		106	81 - 120
Thallium	10.0	10.8		mg/Kg		108	86 - 116
Zinc	50.0	52.2		mg/Kg		104	84 - 116

Lab Sample ID: 460-330610-B-15-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 677999 — **Prep Batch: 674917**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	3.1		33.6	33.7		mg/Kg	☼	91	75 - 125
Arsenic	14		168	192		mg/Kg	☼	107	75 - 125
Barium	130	FH	168	348	FH	mg/Kg	☼	133	75 - 125
Beryllium	5.6		16.8	24.6		mg/Kg	☼	113	75 - 125
Cadmium	13		16.8	33.4		mg/Kg	☼	122	75 - 125
Chromium	170	FH	168	389	FH	mg/Kg	☼	131	75 - 125
Copper	98		168	290		mg/Kg	☼	115	75 - 125
Lead	120	4 F2	16.8	159	4	mg/Kg	☼	217	75 - 125
Molybdenum	2.2		16.8	21.1		mg/Kg	☼	113	75 - 125
Nickel	55		168	243		mg/Kg	☼	113	75 - 125
Selenium	1.4		33.5	37.3		mg/Kg	☼	107	75 - 125
Silver	0.49		16.8	19.1		mg/Kg	☼	111	75 - 125
Sodium	530		1680	2450		mg/Kg	☼	114	75 - 125
Thallium	0.32		33.5	35.4		mg/Kg	☼	105	75 - 125
Zinc	830	4	168	1130	4	mg/Kg	☼	183	75 - 125

Lab Sample ID: 460-330610-B-15-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 677999 — **Prep Batch: 674917**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	3.1		31.0	30.1		mg/Kg	☼	87	75 - 125	11	20
Arsenic	14		155	179		mg/Kg	☼	107	75 - 125	7	20
Barium	130	FH	155	329	FH	mg/Kg	☼	131	75 - 125	6	20
Beryllium	5.6		15.5	22.6		mg/Kg	☼	110	75 - 125	8	20
Cadmium	13		15.5	32.1		mg/Kg	☼	124	75 - 125	4	20
Chromium	170	FH	155	406	FH	mg/Kg	☼	152	75 - 125	4	20
Copper	98		155	273		mg/Kg	☼	113	75 - 125	6	20
Lead	120	4 F2	15.5	214	4 F2	mg/Kg	☼	593	75 - 125	30	20
Molybdenum	2.2		15.5	19.4		mg/Kg	☼	111	75 - 125	9	20
Nickel	55		155	239		mg/Kg	☼	119	75 - 125	2	20
Selenium	1.4		31.0	34.3		mg/Kg	☼	106	75 - 125	8	20
Silver	0.49		15.5	17.7		mg/Kg	☼	111	75 - 125	8	20
Sodium	530		1550	2180		mg/Kg	☼	107	75 - 125	11	20
Thallium	0.32		31.0	32.5		mg/Kg	☼	104	75 - 125	8	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 460-330610-B-15-A DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 677999 — **Prep Batch: 674917**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	3.1		3.08		mg/Kg	☼	0.4	20
Arsenic	14		14.5		mg/Kg	☼	7	20
Barium	130	FH	135		mg/Kg	☼	7	20
Beryllium	5.6		6.10		mg/Kg	☼	9	20
Cadmium	13		13.9		mg/Kg	☼	8	20
Chromium	170	FH	184		mg/Kg	☼	8	20
Copper	98		105		mg/Kg	☼	7	20
Lead	120	4 F2	133		mg/Kg	☼	8	20
Molybdenum	2.2		2.23		mg/Kg	☼	0.6	20
Nickel	55		63.2		mg/Kg	☼	15	20
Selenium	1.4		1.35		mg/Kg	☼	1	20
Silver	0.49		0.513		mg/Kg	☼	4	20
Sodium	530		588		mg/Kg	☼	7	20
Thallium	0.32		0.353		mg/Kg	☼	10	20
Zinc	830	4	910		mg/Kg	☼	10	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-675101/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675416 — **Prep Batch: 675101**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		07/23/25 10:30	07/23/25 14:02	1

Lab Sample ID: 180-192919-H-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675416 — **Prep Batch: 675101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	FH	0.168	0.236	FH	mg/Kg	☼	122	80 - 120

Lab Sample ID: 180-192919-H-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675416 — **Prep Batch: 675101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	FH	0.179	0.245		mg/Kg	☼	120	80 - 120	4	20

Lab Sample ID: 180-192919-J-1-A DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675416 — **Prep Batch: 675101**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND	FH	ND		mg/Kg	☼	NC	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-192915-A-1 DU
Matrix: Solid
Analysis Batch: 499491

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	87			87.9		%				1	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193019-1
SDG: 250710013

Metals

Prep Batch: 674917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193019-1	250710013-01	Total/NA	Solid	3050B	
MB 410-674917/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-674917/2-A	Lab Control Sample	Total/NA	Solid	3050B	
460-330610-B-15-B MS	Matrix Spike	Total/NA	Solid	3050B	
460-330610-B-15-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
460-330610-B-15-A DU	Duplicate	Total/NA	Solid	3050B	

Prep Batch: 675101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193019-1	250710013-01	Total/NA	Solid	7471B	
MB 410-675101/1-A	Method Blank	Total/NA	Solid	7471B	
180-192919-H-1-B MS	Matrix Spike	Total/NA	Solid	7471B	
180-192919-H-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
180-192919-J-1-A DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 675416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193019-1	250710013-01	Total/NA	Solid	7471B	675101
MB 410-675101/1-A	Method Blank	Total/NA	Solid	7471B	675101
180-192919-H-1-B MS	Matrix Spike	Total/NA	Solid	7471B	675101
180-192919-H-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	675101
180-192919-J-1-A DU	Duplicate	Total/NA	Solid	7471B	675101

Analysis Batch: 677394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193019-1	250710013-01	Total/NA	Solid	6010D	674917
MB 410-674917/1-A	Method Blank	Total/NA	Solid	6010D	674917
LCS 410-674917/2-A	Lab Control Sample	Total/NA	Solid	6010D	674917

Analysis Batch: 677999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193019-1	250710013-01	Total/NA	Solid	6020B	674917
MB 410-674917/1-A	Method Blank	Total/NA	Solid	6020B	674917
LCS 410-674917/2-A	Lab Control Sample	Total/NA	Solid	6020B	674917
460-330610-B-15-B MS	Matrix Spike	Total/NA	Solid	6020B	674917
460-330610-B-15-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6020B	674917
460-330610-B-15-A DU	Duplicate	Total/NA	Solid	6020B	674917

General Chemistry

Analysis Batch: 499491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193019-1	250710013-01	Total/NA	Solid	SM 2540G	
180-192915-A-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250710013**

Tests to be Performed: See attached Parameter List

Additional Information : Quarterly Limed Sludge

Sample composited on July 10 from grabs collected on July 2, July 6, July 7, July 8, July 9, July 10

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers
250710013-01	7/10/25	1010	S	N	C	Always maintain sample/extract at 25°C when reading any pH result. Solids must be analyzed by 2540G. All methods must be accredited by PADEP or NELAC. Email a copy of LIMS login with signed COC as soon as possible after receipt. Report Level II data package. Document ASTM Extraction date/time And out of hold extraction on report.	1

180-193019 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	7/11/25	0915	[signature]	EUROFINS	7-11-25	9:45
[signature]	EPTNE	7-11-25	12:10	[signature]	EPTNE	7/11/25	1210
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: [illegible] Date: 7/11/25 Supervisor Review: Initials: [illegible] Date: 7-10-25

METALS

COMPOSITE

Environmental Compliance Laboratory

Contract Lab ONLY Quarterly Analysis, includes **Unlimed Sludge** (one quarter per year)

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM , LIMED SLUDGE & UNLIMED SLUDGE- ONE QUARTER PER YEAR (all sent to outside lab)			
7 days of a Grab sample to generate a Composite* (minimum 6 grabs) Each sample matrix is analyzed for all parameters listed. ---------- NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlimed sludge is included, analyses are performed by contract laboratory(s) only- **see Residuals for which quarter.** **Check reporting limit requirments.**	Quarterly	METALS ONLY COMPOSITE (Half Pint) Lancaster Lab Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, Antimony, Beryllium, Molybdenum, Nickel, Zinc, Boron Mercury, Total Sulfur (SW846 6010), Copper, Thallium, Sodium, Total Solids (SM2540G)	Laboratory

Red indicates analyses performed by a contract laboratory

SEND ONE HALF PINT OF COMPOSITE

Log metals sample, and metals TS sample, with separate LIMS ID number and add "report due by "XDATEX" on COC

Alcosan #20 -0.8

J6	2.3	1.5
J7	3.6	2.8

180-199019 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-542078.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-193019-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 7/24/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050BSulfur and Boron	7471B/7471B_PrepMercury	6020B/3050BQuarterly Custom Total Metals										Total Number of containers	Special Instructions/Note:
			Preservation Code:																	
250710013-01 (180-193019-1)	7/10/25	10:10 Eastern	G	Solid			X	X	X										1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	7-14-25 1500	EP, HNE	[signature]	7-14-25 15:15	ELLE
[signature]	7-14-25 20:50	ELLE			
			[signature]	7/14/25 2040	ELLET

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: N5.6- C5.6

mB

Ver: 10/10/2024

7/30/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-193019-1
SDG Number: 250710013

Login Number: 193019
List Number: 1
Creator: Brown, Shall

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-193019-1
SDG Number: 250710013

Login Number: 193019
List Number: 2
Creator: Ballard, Megan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/15/25 12:30 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250722014 **Sample Date:** 7/21/2025

Sample ID Number: 250722014-01 **Sample Type:** GRAB

Customer Sample Number: VOA GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/23/2025	39	%	0.50		
Volatile Organics								
Volatile Organics	Contract Lab	EurofinsLancaster	8/1/2025	See attached report	ug/Kg Dry			

Data Qualifier **Data Qualifier Description**

Comments:

QUARTERLY GRAB. RESAMPLE VOA & TS GRABS

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by: Larissa Hawk

8-13-25

Date

Printed Date
Wednesday, August 13, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 8/8/2025 12:04:24 PM

JOB DESCRIPTION

Quarterly Limed Sludge
250722014

JOB NUMBER

180-193451-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 12
QC Association Summary 19
Chain of Custody 20
Receipt Checklists 22

Job Narrative
180-193451-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 7/22/2025 1:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Method 8260D: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to detections over calibration range in the initial analysis. 250722014-01 (180-193451-1)

Method 8260D: Surrogate recovery for the following sample was outside control limits: 250722014-01 (180-193451-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: Internal standard responses were outside of acceptance limits for the following sample: 250722014-01 (180-193451-1). The sample(s) shows evidence of matrix interference.

Method 8260D: The continuing calibration verification (CCV) associated with batch 410-679307 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with sodium bisulfate : 250722014-01 (180-193451-1). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

Method 8260D: The result for Acetone and Methyl Ethyl Ketone on 410-679307 was above the upper calibration range and is reported as an Estimated ("E") value in sample: 250722014-01 (180-193451-1). As per client direction.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
^c	CCV Recovery is outside acceptance limits.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-193451-1	250722014-01	Solid	07/21/25 11:02	07/22/25 13:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
5035	Closed System Purge and Trap	SW846	ELLE

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

Client Sample ID: 250722014-01 **Lab Sample ID: 180-193451-1**
Date Collected: 07/21/25 11:02 **Matrix: Solid**
Date Received: 07/22/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			500100	07/23/25 11:51	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250722014-01 **Lab Sample ID: 180-193451-1**
Date Collected: 07/21/25 11:02 **Matrix: Solid**
Date Received: 07/22/25 13:30 **Percent Solids: 39.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035	DL		5.11 g	5 mL	679338	08/01/25 08:14	PV7W	ELLE
Total/NA	Analysis	8260D	DL	50	5 mL	5 mL	680622	08/05/25 03:49	UKAD	ELLE
	Instrument ID: 7566									
Total/NA	Prep	5035			1.02 g	5 mL	679339	08/01/25 08:14	PV7W	ELLE
Total/NA	Analysis	8260D		1	5 g	5 mL	679307	08/01/25 14:57	ULCP	ELLE
	Instrument ID: 9665									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Analysis
  - ELS = Edwin Shireman

Lab: ELLE
- Batch Type: Prep
  - PV7W = Trinity Breneman
- Batch Type: Analysis
  - UKAD = Kevin Sposito
  - ULCP = Linda Pape

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

Client Sample ID: 250722014-01
Date Collected: 07/21/25 11:02
Date Received: 07/22/25 13:30

Lab Sample ID: 180-193451-1
Matrix: Solid
Percent Solids: 39.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,1,2,2-Tetrachloroethane	ND	*3	63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,1,2-Trichloroethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,1-Dichloroethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,1-Dichloroethene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,2-Dichlorobenzene	ND	*3	63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,2-Dichloroethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,2-Dichloropropane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,3-Dichlorobenzene	ND	*3	63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
1,4-Dichlorobenzene	ND	*3	63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
2-Chloroethyl vinyl ether	**NC**		130		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
2-Hexanone	ND		130		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Acetone	**34000**	**E**	250		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Benzene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Bromodichloromethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Bromoform	ND		130		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Bromomethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Carbon disulfide	**190**		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Carbon tetrachloride	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Chlorobenzene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Chloroethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Chloroform	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Chloromethane	ND	^c	63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
cis-1,3-Dichloropropene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Dibromochloromethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Ethylbenzene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Methyl Ethyl Ketone	**10000**	**E**	130		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
methyl isobutyl ketone	ND		130		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Methylene Chloride	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
m-Xylene & p-Xylene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
o-Xylene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Styrene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Tetrachloroethene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Toluene	**3800**		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
trans-1,2-Dichloroethene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
trans-1,3-Dichloropropene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Trichloroethene	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Trichlorofluoromethane	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Vinyl acetate	ND		130		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Vinyl chloride	ND		63		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1
Xylenes, Total	ND		130		ug/Kg	☼	08/01/25 08:14	08/01/25 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*54 - 135*	*08/01/25 08:14*	*08/01/25 14:57*	*1*
4-Bromofluorobenzene (Surr)	*76*		*50 - 131*	*08/01/25 08:14*	*08/01/25 14:57*	*1*
Dibromofluoromethane (Surr)	*104*		*50 - 141*	*08/01/25 08:14*	*08/01/25 14:57*	*1*
Toluene-d8 (Surr)	*116*		*52 - 141*	*08/01/25 08:14*	*08/01/25 14:57*	*1*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

Client Sample ID: 250722014-01
Date Collected: 07/21/25 11:02
Date Received: 07/22/25 13:30

Lab Sample ID: 180-193451-1
Matrix: Solid
Percent Solids: 39.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	6200	H	2000		ug/Kg	☼	08/01/25 08:14	08/05/25 03:49	50
Acetone	18000	H	4100		ug/Kg	☼	08/01/25 08:14	08/05/25 03:49	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*47*	*S1-*	*54 - 135*	*08/01/25 08:14*	*08/05/25 03:49*	*50*
4-Bromofluorobenzene (Surr)	*46*	*S1-*	*50 - 131*	*08/01/25 08:14*	*08/05/25 03:49*	*50*
Dibromofluoromethane (Surr)	*34*	*S1-*	*50 - 141*	*08/01/25 08:14*	*08/05/25 03:49*	*50*
Toluene-d8 (Surr)	*50*	*S1-*	*52 - 141*	*08/01/25 08:14*	*08/05/25 03:49*	*50*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	39		0.50		%			07/23/25 11:51	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-679307/7
Matrix: Solid
Analysis Batch: 679307

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0		ug/Kg			08/01/25 11:37	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			08/01/25 11:37	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			08/01/25 11:37	1
1,1-Dichloroethane	ND		5.0		ug/Kg			08/01/25 11:37	1
1,1-Dichloroethene	ND		5.0		ug/Kg			08/01/25 11:37	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			08/01/25 11:37	1
1,2-Dichloroethane	ND		5.0		ug/Kg			08/01/25 11:37	1
1,2-Dichloropropane	ND		5.0		ug/Kg			08/01/25 11:37	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			08/01/25 11:37	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			08/01/25 11:37	1
2-Chloroethyl vinyl ether	NC		10		ug/Kg			08/01/25 11:37	1
2-Hexanone	ND		10		ug/Kg			08/01/25 11:37	1
Acetone	ND		20		ug/Kg			08/01/25 11:37	1
Benzene	ND		5.0		ug/Kg			08/01/25 11:37	1
Bromodichloromethane	ND		5.0		ug/Kg			08/01/25 11:37	1
Bromoform	ND		10		ug/Kg			08/01/25 11:37	1
Bromomethane	ND		5.0		ug/Kg			08/01/25 11:37	1
Carbon disulfide	ND		5.0		ug/Kg			08/01/25 11:37	1
Carbon tetrachloride	ND		5.0		ug/Kg			08/01/25 11:37	1
Chlorobenzene	ND		5.0		ug/Kg			08/01/25 11:37	1
Chloroethane	ND		5.0		ug/Kg			08/01/25 11:37	1
Chloroform	ND		5.0		ug/Kg			08/01/25 11:37	1
Chloromethane	ND		5.0		ug/Kg			08/01/25 11:37	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			08/01/25 11:37	1
Dibromochloromethane	ND		5.0		ug/Kg			08/01/25 11:37	1
Ethylbenzene	ND		5.0		ug/Kg			08/01/25 11:37	1
Methyl Ethyl Ketone	ND		10		ug/Kg			08/01/25 11:37	1
methyl isobutyl ketone	ND		10		ug/Kg			08/01/25 11:37	1
Methylene Chloride	ND		5.0		ug/Kg			08/01/25 11:37	1
m-Xylene & p-Xylene	ND		5.0		ug/Kg			08/01/25 11:37	1
o-Xylene	ND		5.0		ug/Kg			08/01/25 11:37	1
Styrene	ND		5.0		ug/Kg			08/01/25 11:37	1
Tetrachloroethene	ND		5.0		ug/Kg			08/01/25 11:37	1
Toluene	ND		5.0		ug/Kg			08/01/25 11:37	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			08/01/25 11:37	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			08/01/25 11:37	1
Trichloroethene	ND		5.0		ug/Kg			08/01/25 11:37	1
Trichlorofluoromethane	ND		5.0		ug/Kg			08/01/25 11:37	1
Vinyl acetate	ND		10		ug/Kg			08/01/25 11:37	1
Vinyl chloride	ND		5.0		ug/Kg			08/01/25 11:37	1
Xylenes, Total	ND		10		ug/Kg			08/01/25 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*54 - 135*		*08/01/25 11:37*	*1*
4-Bromofluorobenzene (Surr)	*96*		*50 - 131*		*08/01/25 11:37*	*1*
Dibromofluoromethane (Surr)	*101*		*50 - 141*		*08/01/25 11:37*	*1*
Toluene-d8 (Surr)	*97*		*52 - 141*		*08/01/25 11:37*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-679307/4
Matrix: Solid
Analysis Batch: 679307

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	20.7		ug/Kg		103	69 - 123
1,1,2,2-Tetrachloroethane	20.0	16.5		ug/Kg		82	69 - 125
1,1,2-Trichloroethane	20.0	18.2		ug/Kg		91	76 - 120
1,1-Dichloroethane	20.0	20.1		ug/Kg		100	68 - 120
1,1-Dichloroethene	20.0	22.6		ug/Kg		113	73 - 129
1,2-Dichlorobenzene	20.0	19.1		ug/Kg		95	74 - 120
1,2-Dichloroethene	20.0	18.6		ug/Kg		93	72 - 124
1,2-Dichloropropane	20.0	19.2		ug/Kg		96	70 - 124
1,3-Dichlorobenzene	20.0	19.7		ug/Kg		98	75 - 120
1,4-Dichlorobenzene	20.0	19.6		ug/Kg		98	76 - 122
2-Hexanone	250	198		ug/Kg		79	54 - 140
Acetone	250	235		ug/Kg		94	28 - 169
Benzene	20.0	19.8		ug/Kg		99	80 - 120
Bromodichloromethane	20.0	18.9		ug/Kg		95	70 - 120
Bromoform	20.0	17.9		ug/Kg		89	66 - 127
Bromomethane	20.0	17.8		ug/Kg		89	60 - 120
Carbon disulfide	20.0	19.6		ug/Kg		98	64 - 133
Carbon tetrachloride	20.0	21.0		ug/Kg		105	64 - 120
Chlorobenzene	20.0	19.5		ug/Kg		97	74 - 120
Chloroethane	20.0	18.0		ug/Kg		90	55 - 127
Chloroform	20.0	19.8		ug/Kg		99	73 - 120
Chloromethane	20.0	15.2		ug/Kg		76	43 - 120
cis-1,3-Dichloropropene	20.0	18.3		ug/Kg		91	66 - 120
Dibromochloromethane	20.0	18.0		ug/Kg		90	69 - 125
Ethylbenzene	20.0	20.7		ug/Kg		103	72 - 118
Methyl Ethyl Ketone	250	236		ug/Kg		94	48 - 142
methyl isobutyl ketone	250	214		ug/Kg		86	67 - 138
Methylene Chloride	20.0	20.4		ug/Kg		102	76 - 122
m-Xylene & p-Xylene	40.0	41.3		ug/Kg		103	80 - 120
o-Xylene	20.0	20.4		ug/Kg		102	75 - 120
Styrene	20.0	20.9		ug/Kg		104	76 - 120
Tetrachloroethene	20.0	21.1		ug/Kg		105	73 - 120
Toluene	20.0	19.7		ug/Kg		99	71 - 120
trans-1,2-Dichloroethene	20.0	20.9		ug/Kg		104	71 - 126
trans-1,3-Dichloropropene	20.0	18.6		ug/Kg		93	68 - 122
Trichloroethene	20.0	20.2		ug/Kg		101	72 - 120
Trichlorofluoromethane	20.0	17.2		ug/Kg		86	49 - 120
Vinyl chloride	20.0	16.9		ug/Kg		85	52 - 120
Xylenes, Total	60.0	61.7		ug/Kg		103	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*54 - 135*
4-Bromofluorobenzene (Surr)	*100*		*50 - 131*
Dibromofluoromethane (Surr)	*100*		*50 - 141*
Toluene-d8 (Surr)	*101*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-679307/59
Matrix: Solid
Analysis Batch: 679307

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	100	85.1		ug/Kg		85	68 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*54 - 135*
4-Bromofluorobenzene (Surr)	*97*		*50 - 131*
Dibromofluoromethane (Surr)	*101*		*50 - 141*
Toluene-d8 (Surr)	*99*		*52 - 141*

Lab Sample ID: LCSD 410-679307/5
Matrix: Solid
Analysis Batch: 679307

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	20.3		ug/Kg		102	69 - 123	2	30
1,1,2,2-Tetrachloroethane	20.0	18.4		ug/Kg		92	69 - 125	11	30
1,1,2-Trichloroethane	20.0	18.7		ug/Kg		94	76 - 120	3	30
1,1-Dichloroethane	20.0	19.8		ug/Kg		99	68 - 120	2	30
1,1-Dichloroethene	20.0	21.6		ug/Kg		108	73 - 129	4	30
1,2-Dichlorobenzene	20.0	19.5		ug/Kg		97	74 - 120	2	30
1,2-Dichloroethane	20.0	18.8		ug/Kg		94	72 - 124	1	30
1,2-Dichloropropane	20.0	19.2		ug/Kg		96	70 - 124	0	30
1,3-Dichlorobenzene	20.0	19.7		ug/Kg		98	75 - 120	0	30
1,4-Dichlorobenzene	20.0	19.7		ug/Kg		98	76 - 122	0	30
2-Hexanone	250	228		ug/Kg		91	54 - 140	14	30
Acetone	250	218		ug/Kg		87	28 - 169	7	30
Benzene	20.0	19.4		ug/Kg		97	80 - 120	2	30
Bromodichloromethane	20.0	18.8		ug/Kg		94	70 - 120	1	30
Bromoform	20.0	18.4		ug/Kg		92	66 - 127	3	30
Bromomethane	20.0	17.2		ug/Kg		86	60 - 120	3	30
Carbon disulfide	20.0	18.6		ug/Kg		93	64 - 133	5	30
Carbon tetrachloride	20.0	20.5		ug/Kg		103	64 - 120	2	30
Chlorobenzene	20.0	19.5		ug/Kg		98	74 - 120	0	30
Chloroethane	20.0	17.2		ug/Kg		86	55 - 127	4	30
Chloroform	20.0	19.5		ug/Kg		97	73 - 120	2	30
Chloromethane	20.0	14.3		ug/Kg		72	43 - 120	6	30
cis-1,3-Dichloropropene	20.0	18.1		ug/Kg		91	66 - 120	1	30
Dibromochloromethane	20.0	17.9		ug/Kg		90	69 - 125	0	30
Ethylbenzene	20.0	20.0		ug/Kg		100	72 - 118	3	30
Methyl Ethyl Ketone	250	214		ug/Kg		85	48 - 142	10	30
methyl isobutyl ketone	250	242		ug/Kg		97	67 - 136	12	30
Methylene Chloride	20.0	20.3		ug/Kg		102	76 - 122	0	30
m-Xylene & p-Xylene	40.0	40.2		ug/Kg		100	80 - 120	3	30
o-Xylene	20.0	19.8		ug/Kg		99	75 - 120	3	30
Styrene	20.0	20.6		ug/Kg		103	76 - 120	1	30
Tetrachloroethene	20.0	20.3		ug/Kg		101	73 - 120	4	30
Toluene	20.0	19.4		ug/Kg		97	71 - 120	2	30
trans-1,2-Dichloroethene	20.0	20.1		ug/Kg		100	71 - 126	4	30
trans-1,3-Dichloropropene	20.0	18.9		ug/Kg		95	68 - 122	2	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-679307/5
Matrix: Solid
Analysis Batch: 679307

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichloroethene	20.0	19.8		ug/Kg		99	72 - 120	2	30
Trichlorofluoromethane	20.0	16.9		ug/Kg		84	49 - 120	2	30
Vinyl chloride	20.0	16.0		ug/Kg		80	52 - 120	6	30
Xylenes, Total	60.0	60.0		ug/Kg		100	75 - 120	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*54 - 135*
4-Bromofluorobenzene (Surr)	*100*		*50 - 131*
Dibromofluoromethane (Surr)	*100*		*50 - 141*
Toluene-d8 (Surr)	*99*		*52 - 141*

Lab Sample ID: LCSD 410-679307/58
Matrix: Solid
Analysis Batch: 679307

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	100	77.6		ug/Kg		78	68 - 128	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*54 - 135*
4-Bromofluorobenzene (Surr)	*96*		*50 - 131*
Dibromofluoromethane (Surr)	*100*		*50 - 141*
Toluene-d8 (Surr)	*99*		*52 - 141*

Lab Sample ID: MB 410-680622/7
Matrix: Solid
Analysis Batch: 680622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250		ug/Kg			08/05/25 01:04	50
1,1,2,2-Tetrachloroethane	ND		250		ug/Kg			08/05/25 01:04	50
1,1,2-Trichloroethane	ND		250		ug/Kg			08/05/25 01:04	50
1,1-Dichloroethane	ND		250		ug/Kg			08/05/25 01:04	50
1,1-Dichloroethene	ND		250		ug/Kg			08/05/25 01:04	50
1,2-Dichlorobenzene	ND		250		ug/Kg			08/05/25 01:04	50
1,2-Dichloroethane	ND		250		ug/Kg			06/05/25 01:04	50
1,2-Dichloropropane	ND		250		ug/Kg			08/05/25 01:04	50
1,3-Dichlorobenzene	ND		250		ug/Kg			08/05/25 01:04	50
1,4-Dichlorobenzene	ND		250		ug/Kg			08/05/25 01:04	50
2-Chloroethyl vinyl ether	ND		500		ug/Kg			08/05/25 01:04	50
2-Hexanone	ND		500		ug/Kg			08/05/25 01:04	50
Acetone	ND		1000		ug/Kg			08/05/25 01:04	50
Benzene	ND		250		ug/Kg			08/05/25 01:04	50
Bromodichloromethane	ND		250		ug/Kg			08/05/25 01:04	50
Bromoform	ND		500		ug/Kg			08/05/25 01:04	50
Bromomethane	ND		250		ug/Kg			08/05/25 01:04	50
Carbon disulfide	ND		250		ug/Kg			08/05/25 01:04	50
Carbon tetrachloride	ND		250		ug/Kg			08/05/25 01:04	50

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-680622/7
Matrix: Solid
Analysis Batch: 680622

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		250		ug/Kg			08/05/25 01:04	50
Chloroethane	ND		250		ug/Kg			08/05/25 01:04	50
Chloroform	ND		250		ug/Kg			08/05/25 01:04	50
Chloromethane	ND		250		ug/Kg			08/05/25 01:04	50
cis-1,3-Dichloropropene	ND		250		ug/Kg			08/05/25 01:04	50
Dibromochloromethane	ND		250		ug/Kg			08/05/25 01:04	50
Ethylbenzene	ND		250		ug/Kg			08/05/25 01:04	50
Methyl Ethyl Ketone	ND		500		ug/Kg			08/05/25 01:04	50
methyl isobutyl ketone	ND		500		ug/Kg			08/05/25 01:04	50
Methylene Chloride	ND		250		ug/Kg			08/05/25 01:04	50
m-Xylene & p-Xylene	ND		250		ug/Kg			08/05/25 01:04	50
o-Xylene	ND		250		ug/Kg			08/05/25 01:04	50
Styrene	ND		250		ug/Kg			08/05/25 01:04	50
Tetrachloroethene	ND		250		ug/Kg			08/05/25 01:04	50
Toluene	ND		250		ug/Kg			08/05/25 01:04	50
trans-1,2-Dichloroethene	ND		250		ug/Kg			08/05/25 01:04	50
trans-1,3-Dichloropropene	ND		250		ug/Kg			08/05/25 01:04	50
Trichloroethene	ND		250		ug/Kg			08/05/25 01:04	50
Trichlorofluoromethane	ND		250		ug/Kg			08/05/25 01:04	50
Vinyl acetate	ND		500		ug/Kg			08/05/25 01:04	50
Vinyl chloride	ND		250		ug/Kg			08/05/25 01:04	50
Xylenes, Total	ND		250		ug/Kg			08/05/25 01:04	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*54 - 135*		*08/05/25 01:04*	*50*
4-Bromofluorobenzene (Surr)	*89*		*50 - 131*		*08/05/25 01:04*	*50*
Dibromofluoromethane (Surr)	*96*		*50 - 141*		*08/05/25 01:04*	*50*
Toluene-d8 (Surr)	*93*		*52 - 141*		*08/05/25 01:04*	*50*

Lab Sample ID: LCS 410-680622/6
Matrix: Solid
Analysis Batch: 680622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1000	1030		ug/Kg		103	69 - 123
1,1,2,2-Tetrachloroethane	1000	995		ug/Kg		100	69 - 125
1,1,2-Trichloroethane	1000	1020		ug/Kg		102	76 - 120
1,1-Dichloroethane	1000	1020		ug/Kg		102	68 - 120
1,1-Dichloroethene	1000	1130		ug/Kg		113	73 - 129
1,2-Dichlorobenzene	1000	916		ug/Kg		92	74 - 120
1,2-Dichloroethane	1000	986		ug/Kg		99	72 - 124
1,2-Dichloropropane	1000	976		ug/Kg		98	70 - 124
1,3-Dichlorobenzene	1000	940		ug/Kg		94	75 - 120
1,4-Dichlorobenzene	1000	931		ug/Kg		93	76 - 122
2-Chloroethyl vinyl ether	1000	991		ug/Kg		99	68 - 120
2-Hexanone	12500	11900		ug/Kg		95	54 - 140
Acetone	12500	12600		ug/Kg		101	28 - 169
Benzene	1000	1000		ug/Kg		100	80 - 120

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-680622/6
Matrix: Solid
Analysis Batch: 680622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromodichloromethane	1000	1060		ug/Kg		106	70 - 120
Bromoform	1000	1060		ug/Kg		106	66 - 127
Bromomethane	1000	1850	*+	ug/Kg		185	60 - 120
Carbon disulfide	1000	942		ug/Kg		94	64 - 133
Carbon tetrachloride	1000	1100		ug/Kg		110	64 - 120
Chlorobenzene	1000	1030		ug/Kg		103	74 - 120
Chloroethane	1000	1670	*+	ug/Kg		167	55 - 127
Chloroform	1000	1010		ug/Kg		101	73 - 120
Chloromethane	1000	821		ug/Kg		82	43 - 120
cis-1,3-Dichloropropene	1000	986		ug/Kg		99	66 - 120
Dibromochloromethane	1000	1130		ug/Kg		113	69 - 125
Ethylbenzene	1000	978		ug/Kg		98	72 - 118
Methyl Ethyl Ketone	12500	13700		ug/Kg		109	48 - 142
methyl isobutyl ketone	12500	11600		ug/Kg		92	67 - 138
Methylene Chloride	1000	1060		ug/Kg		106	76 - 122
m-Xylene & p-Xylene	2000	2010		ug/Kg		100	80 - 120
o-Xylene	1000	982		ug/Kg		98	75 - 120
Styrene	1000	991		ug/Kg		99	76 - 120
Tetrachloroethene	1000	1080		ug/Kg		108	73 - 120
Toluene	1000	1010		ug/Kg		101	71 - 120
trans-1,2-Dichloroethene	1000	1060		ug/Kg		106	71 - 126
trans-1,3-Dichloropropene	1000	999		ug/Kg		100	68 - 122
Trichloroethene	1000	974		ug/Kg		97	72 - 120
Trichlorofluoromethane	1000	973		ug/Kg		97	49 - 120
Vinyl chloride	1000	904		ug/Kg		90	52 - 120
Xylenes, Total	3000	2990		ug/Kg		100	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 135*
4-Bromofluorobenzene (Surr)	*96*		*50 - 131*
Dibromofluoromethane (Surr)	*100*		*50 - 141*
Toluene-d8 (Surr)	*97*		*62 - 141*

Lab Sample ID: LCSD 410-680622/8
Matrix: Solid
Analysis Batch: 680622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	1030		ug/Kg		103	69 - 123	0	30
1,1,2,2-Tetrachloroethane	1000	962		ug/Kg		96	69 - 125	3	30
1,1,2-Trichloroethane	1000	1010		ug/Kg		101	76 - 120	0	30
1,1-Dichloroethane	1000	1010		ug/Kg		101	68 - 120	0	30
1,1-Dichloroethene	1000	1150		ug/Kg		115	73 - 129	1	30
1,2-Dichlorobenzene	1000	903		ug/Kg		90	74 - 120	1	30
1,2-Dichloroethane	1000	979		ug/Kg		98	72 - 124	1	30
1,2-Dichloropropane	1000	969		ug/Kg		97	70 - 124	1	30
1,3-Dichlorobenzene	1000	926		ug/Kg		93	75 - 120	2	30
1,4-Dichlorobenzene	1000	926		ug/Kg		93	76 - 122	1	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-680622/8
Matrix: Solid
Analysis Batch: 680622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chloroethyl vinyl ether	1000	977		ug/Kg		98	68 - 120	1	30
2-Hexanone	12500	11600		ug/Kg		93	54 - 140	2	30
Acetone	12500	12500		ug/Kg		100	28 - 169	1	30
Benzene	1000	1000		ug/Kg		100	80 - 120	0	30
Bromodichloromethane	1000	1060		ug/Kg		106	70 - 120	1	30
Bromoform	1000	1030		ug/Kg		103	66 - 127	2	30
Bromomethane	1000	1730	*+	ug/Kg		173	60 - 120	7	30
Carbon disulfide	1000	955		ug/Kg		96	64 - 133	1	30
Carbon tetrachloride	1000	1090		ug/Kg		109	84 - 120	0	30
Chlorobenzene	1000	1000		ug/Kg		100	74 - 120	2	30
Chloroethane	1000	1700	*+	ug/Kg		170	55 - 127	1	30
Chloroform	1000	1020		ug/Kg		102	73 - 120	1	30
Chloromethane	1000	816		ug/Kg		82	43 - 120	1	30
cis-1,3-Dichloropropene	1000	974		ug/Kg		97	66 - 120	1	30
Dibromochloromethane	1000	1100		ug/Kg		110	89 - 125	3	30
Ethylbenzene	1000	973		ug/Kg		97	72 - 118	0	30
Methyl Ethyl Ketone	12500	13900		ug/Kg		111	48 - 142	2	30
methyl isobutyl ketone	12500	11300		ug/Kg		90	67 - 138	2	30
Methylene Chloride	1000	1050		ug/Kg		105	76 - 122	1	30
m-Xylene & p-Xylene	2000	1990		ug/Kg		99	80 - 120	1	30
o-Xylene	1000	982		ug/Kg		98	75 - 120	0	30
Styrene	1000	986		ug/Kg		99	76 - 120	1	30
Tetrachloroethene	1000	1080		ug/Kg		108	73 - 120	0	30
Toluene	1000	1000		ug/Kg		100	71 - 120	1	30
trans-1,2-Dichloroethene	1000	1070		ug/Kg		107	71 - 128	1	30
trans-1,3-Dichloropropene	1000	989		ug/Kg		99	68 - 122	1	30
Trichloroethene	1000	973		ug/Kg		97	72 - 120	0	30
Trichlorofluoromethane	1000	979		ug/Kg		98	49 - 120	1	30
Vinyl chloride	1000	883		ug/Kg		88	52 - 120	2	30
Xylenes, Total	3000	2970		ug/Kg		99	75 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*54 - 135*
4-Bromofluorobenzene (Surr)	*94*		*50 - 131*
Dibromofluoromethane (Surr)	*99*		*50 - 141*
Toluene-d8 (Surr)	*96*		*52 - 141*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-193270-B-1 DU
Matrix: Solid
Analysis Batch: 500100

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	71		70.8		%		0.3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-193451-1
SDG: 250722014

GC/MS VOA

Analysis Batch: 679307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193451-1	250722014-01	Total/NA	Solid	8260D	679339
MB 410-679307/7	Method Blank	Total/NA	Solid	8260D	
LCS 410-679307/4	Lab Control Sample	Total/NA	Solid	8260D	
LCS 410-679307/59	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-679307/5	Lab Control Sample Dup	Total/NA	Solid	8260D	
LCSD 410-679307/58	Lab Control Sample Dup	Total/NA	Solid	8260D	

Prep Batch: 679338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193451-1 - DL	250722014-01	Total/NA	Solid	5035	

Prep Batch: 679339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193451-1	250722014-01	Total/NA	Solid	5035	

Analysis Batch: 680622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193451-1 - DL	250722014-01	Total/NA	Solid	8260D	679338
MB 410-680622/7	Method Blank	Total/NA	Solid	8260D	
LCS 410-680622/6	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-680622/8	Lab Control Sample Dup	Total/NA	Solid	8260D	

General Chemistry

Analysis Batch: 500100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193451-1	250722014-01	Total/NA	Solid	SM 2540G	
180-193270-B-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250722014**

Additional Information : Quarterly Limed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: VOA EPA 8260D *	Total Solids					
							Number of Containers						
250722014-01	7/21/25	1102	S	N	G	Always maintain sample/extract at	8	2	J7 #20	2.8 -0.8 2.0			
						25°C when reading any pH result.							
						Solids must be analyzed by 2540G.							
						All methods must be accredited by							
						PADEP or NELAC.							
						Email a copy of LIMS login with signed							
						COC as soon as possible after receipt.							
						Report Level II data package.							
						Document ASTM Extraction date/time							
						And out of hold extraction on report.							

180-193451 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	7-22-25	12 50		EUROFINS	7-22-25	1250
	EMTAC	7-22-25	1330				

COC Analyst Cooler Review: Initials: GV Date: 7-22-25 Supervisor Review: Initials: JJ Date: 7 22 25

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shall	Carrier Tracking No(s): N/A	COC No: 180-542568.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shall.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-193451-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 8/4/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D/5035FP_CalcAlcosan Volatile List	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
250722014-01 (180-193451-1)	7/21/25	11:02 Eastern	G	Solid			X	8	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	7-23-25 1400	EPHNE	[signature]	23 July 25 1500	ELLE
[signature]	23 July 25 1900	ELLE	[signature]		
			[signature]	7/23/25 1900	[signature]

Custody Seals Intact: ☑ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R 4.4 C 4.5

TM

Ver: 10/10/2024

8/8/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-193451-1
SDG Number: 250722014

Login Number: 193451
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-193451-1
SDG Number: 250722014

Login Number: 193451
List Number: 2
Creator: McDonald, Teigan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/24/25 01:05 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250702010

Sample Date: 7/2/2025

Sample ID Number: 250702010-01

Sample Type: GRAB

Customer Sample Number: AMBER GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Phenolics, Total	Contract Lab	EurofinsPittsburgh	7/8/2025	1.6	mg/kg dry	0.62		
Contract Lab								
2,3,7,8-TCDD	Contract Lab	EurofinsLancaster	7/31/2025	<2.9	pg/g Dry	2.9		
PCBs	Contract Lab	EurofinsPittsburgh	7/9/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/8/2025	34	%	0.50		

Printed Date
Wednesday, August 13, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250702010

Sample Date: 7/2/2025

Sample ID Number: 250702010-01

Sample Type: GRAB

Customer Sample Number: AMBER GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

QUARTERLY GRABS

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hoover

8-13-25

Date

Printed Date
Wednesday, August 13, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250702010 **Sample Date:** 7/2/2025

Sample ID Number: 250702010-02 **Sample Type:** GRAB

Customer Sample Number: HEM GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
Hexane Extractable Material	Contract Lab	EurofinsLancaster	7/17/2025	<7.6	mg/L	7.6		
Chemistry								
Hexane Extractable Material	Contract Lab	EurofinsLancaster	7/9/2025	<1700	mg/kg dry	1700		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/8/2025	36	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

QUARTERLY GRABS

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Jessica Hoover

8-13-25

Date

Printed Date
Wednesday, August 13, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 250702010 **Sample Date:** 7/2/2025

Sample ID Number: 250702010-03 **Sample Type:** GRAB

Customer Sample Number: VOA GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/8/2025	35	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

QUARTERLY GRABS

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416

Released by: Lorisa Hoover 8-13-25

Date

Printed Date
Wednesday, August 13, 2025

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ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 7/31/2025 10:18:38 PM

JOB DESCRIPTION

Quarterly Limed Sludge
250702010

JOB NUMBER

180-192734-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 11
QC Sample Results 15
QC Association Summary 19
Chain of Custody 21
Receipt Checklists 24

Job Narrative
180-192734-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 7/3/2025 1:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.1°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

PCBs
Method 8082A: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 250702010-01 (180-192734-1), (LCS 180-499176/2-A), (MB 180-499176/1-A), (480-230456-F-16-A), (480-230456-F-16-B MS) and (480-230456-F-16-C MSD).6215174

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 250702010-01 (180-192734-1), (LCS 180-499176/2-A), (MB 180-499176/1-A), (480-230456-F-16-A), (480-230456-F-16-B MS) and (480-230456-F-16-C MSD).6239381
4297660

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Dioxin
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 1664B_NP - ASTM Leach: Elevated reporting limits are provided for the following sample due to insufficient sample provided for analysis: 250702010-02 (180-192734-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Qualifiers

General Chemistry

Qualifier	Qualifier Description
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-192734-1	250702010-01	Solid	07/02/25 11:03	07/03/25 13:30
180-192734-2	250702010-02	Solid	07/02/25 11:03	07/03/25 13:30
180-192734-3	250702010-03	Solid	07/02/25 11:03	07/03/25 13:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	ELLE
1664B	HEM and SGT-HEM	1664B	ELLE
9071B	HEM and SGT-HEM	SW846	ELLE
EPA 9065	Phenolics, Total Recoverable	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
9071B	Praperation, HEM and SGT-HEM	SW846	ELLE
D3987-85	ASTM Leaching Procedure	ASTM	ELLE
Distill/Phenol	Distillation, Phenolics	None	EET PIT
HRMS-Soxtherm	Soxtherm Extraction	EPA	ELLE

Protocol References:

1664B = EPA-821-98-002
ASTM = ASTM International
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Client Sample ID: 250702010-01
Lab Sample ID: 180-192734-1
Date Collected: 07/02/25 11:03
Matrix: Solid
Date Received: 07/03/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			499148	07/08/25 11:49	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250702010-01
Lab Sample ID: 180-192734-1
Date Collected: 07/02/25 11:03
Matrix: Solid
Date Received: 07/03/25 13:30
Percent Solids: 33.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	499176	07/08/25 15:58	DVC	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	499222	07/09/25 13:43	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	HRMS-Soxtherm			10.13 g	20 uL	677350	07/28/25 19:42	SA8Q	ELLE
Total/NA	Analysis	8290A		1	20 uL	20 uL	678547	07/31/25 17:01	U4LD	ELLE
	Instrument ID: DF17280B									
Total/NA	Prep	Distill/Phenol			0.48 g	10.0 mL	499070	07/07/25 07:02	RSK	EET PIT
Total/NA	Analysis	EPA 9065		1			499152	07/08/25 11:40	RSK	EET PIT
	Instrument ID: SHAMU									

Client Sample ID: 250702010-02
Lab Sample ID: 180-192734-2
Date Collected: 07/02/25 11:03
Matrix: Solid
Date Received: 07/03/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			100.27 g	2000 mL	668164	07/08/25 14:03	UNWS	ELLE
ASTM Leach	Analysis	1664B		1	660 mL	1000 mL	672540	07/17/25 09:20	UYB0	ELLE
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540G		1			499148	07/08/25 11:49	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250702010-02
Lab Sample ID: 180-192734-2
Date Collected: 07/02/25 11:03
Matrix: Solid
Date Received: 07/03/25 13:30
Percent Solids: 35.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9071B			20.09 g	20.00 g	668584	07/09/25 00:49	QT6L	ELLE
Total/NA	Analysis	9071B		1			669203	07/09/25 23:34	QT6L	ELLE
	Instrument ID: NOEQUIP									

Client Sample ID: 250702010-03
Lab Sample ID: 180-192734-3
Date Collected: 07/02/25 11:03
Matrix: Solid
Date Received: 07/03/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			499148	07/08/25 11:49	ELS	EET PIT
	Instrument ID: NOEQUIP									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT

Batch Type: Prep

DVC = Daniel Capodanno

RSK = Robert Kurtz

Batch Type: Analysis

ELS = Edwin Shireman

JMO = John Orevec

RSK = Robert Kurtz

Lab: ELLE

Batch Type: Leach

UNWS = Nicholas Shroyer

Batch Type: Prep

QT6L = Tesfaye Dabsu

SA8Q = Erik Greavison

Batch Type: Analysis

QT6L = Tesfaye Dabsu

U4LD = Arda Ates

UYB0 = Yolunder Bunch

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Client Sample ID: 250702010-01
Date Collected: 07/02/25 11:03
Date Received: 07/03/25 13:30

Lab Sample ID: 180-192734-1
Matrix: Solid
Percent Solids: 33.5

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg	☼	07/08/25 15:58	07/09/25 13:43	1
PCB-1221	ND		50		ug/Kg	☼	07/08/25 15:58	07/09/25 13:43	1
PCB-1232	ND		50		ug/Kg	☼	07/08/25 15:58	07/09/25 13:43	1
PCB-1242	ND		50		ug/Kg	☼	07/08/25 15:58	07/09/25 13:43	1
PCB-1248	ND		50		ug/Kg	☼	07/08/25 15:58	07/09/25 13:43	1
PCB-1254	**370**		50		ug/Kg	☼	07/08/25 15:58	07/09/25 13:43	1
PCB-1260	ND		50		ug/Kg	☼	07/08/25 15:58	07/09/25 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*101*		*17 - 144*	*07/08/25 15:58*	*07/09/25 13:43*	*1*
Tetrachloro-m-xylene (Surr)	*93*		*17 - 144*	*07/08/25 15:58*	*07/09/25 13:43*	*1*
DCB Decachlorobiphenyl (Surr)	*96*		*26 - 142*	*07/08/25 15:58*	*07/09/25 13:43*	*1*
DCB Decachlorobiphenyl (Surr)	*93*		*26 - 142*	*07/08/25 15:58*	*07/09/25 13:43*	*1*

Method: SW846 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		2.9		pg/g	☼	07/28/25 19:42	07/31/25 17:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*77*		*40 - 135*	*07/28/25 19:42*	*07/31/25 17:01*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (SW846 EPA 9065)	**1.6**		0.62		mg/Kg	☼	07/07/25 07:02	07/08/25 11:40	1
Total Solids (SM 2540G)	**34**		0.50		%			07/08/25 11:49	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Client Sample ID: 250702010-02
Date Collected: 07/02/25 11:03
Date Received: 07/03/25 13:30

Lab Sample ID: 180-192734-2
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	36		0.50		%			07/08/25 11:49	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (1664B)	ND		7.6		mg/L			07/17/25 09:20	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Client Sample ID: 250702010-02
Date Collected: 07/02/25 11:03
Date Received: 07/03/25 13:30

Lab Sample ID: 180-192734-2
Matrix: Solid
Percent Solids: 35.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (SW846 9071B)	ND		1700		mg/Kg	☼	07/09/25 00:49	07/09/25 23:34	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Client Sample ID: 250702010-03
Date Collected: 07/02/25 11:03
Date Received: 07/03/25 13:30

Lab Sample ID: 180-192734-3
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	35		0.50		%			07/08/25 11:49	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-499176/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1221	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1232	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1242	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1248	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1254	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1
PCB-1260	ND		17		ug/Kg		07/08/25 15:58	07/09/25 13:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*17*		*17 - 144*	*07/08/25 15:58*	*07/09/25 13:25*	*1*
Tetrachloro-m-xylene (Surr)	*18*		*17 - 144*	*07/08/25 15:58*	*07/09/25 13:25*	*1*
DCB Decachlorobiphenyl (Surr)	*79*		*26 - 142*	*07/08/25 15:58*	*07/09/25 13:25*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*26 - 142*	*07/08/25 15:58*	*07/09/25 13:25*	*1*

Lab Sample ID: LCS 180-499176/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1350		ug/Kg		102	53 - 115
PCB-1260	1330	1170		ug/Kg		88	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*112*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*111*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*98*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*96*		*26 - 142*

Lab Sample ID: 480-230456-F-16-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		1300	1050		ug/Kg		81	53 - 115
PCB-1260	ND		1300	986		ug/Kg		78	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*88*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*86*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*84*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*87*		*26 - 142*

Lab Sample ID: 480-230456-F-16-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1320	1030		ug/Kg		79	53 - 115	2	25

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-230456-F-16-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499222 — **Prep Batch: 499176**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1260	ND		1320	955		ug/Kg		73	45 - 108	3	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*84*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*84*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*83*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*83*		*26 - 142*

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 410-677350/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 677391 — **Prep Batch: 677350**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0		pg/g		07/28/25 19:42	07/29/25 19:48	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*102*		*40 - 135*	*07/28/25 19:42*	*07/29/25 19:48*	*1*

Lab Sample ID: LCS 410-677350/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 677391 — **Prep Batch: 677350**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,3,7,8-TCDD	20.0	19.4		pg/g		97	66 - 120

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*109*		*40 - 135*

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 410-672540/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 672540

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L			07/17/25 09:20	1

Lab Sample ID: LCS 410-672540/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 672540

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.0	35.0		mg/L		88	78 - 114

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: LCSD 410-672540/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 672540

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	34.8		mg/L		87	78 - 114	1	13

Lab Sample ID: 410-232172-B-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 672540

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	ND	FL	44.4	21.1	FL	mg/L		48	78 - 114

Method: 9071B - HEM and SGT-HEM

Lab Sample ID: MB 410-668584/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 669203 — **Prep Batch: 668584**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		600		mg/Kg		07/09/25 00:49	07/09/25 23:34	1

Lab Sample ID: LCS 410-668584/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 669203 — **Prep Batch: 668584**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	4970	4560		mg/Kg		92	89 - 113

Lab Sample ID: 460-329385-B-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 669203 — **Prep Batch: 668584**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	ND	FL	6130	2780	FL	mg/Kg	☼	38	89 - 113

Lab Sample ID: 460-329385-B-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 669203 — **Prep Batch: 668584**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	ND	FL	6120	3090	FL	mg/Kg	☼	43	89 - 113	10	26

Lab Sample ID: 460-329385-B-1-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 669203 — **Prep Batch: 668584**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
HEM (Oil & Grease)	ND	FL	ND		mg/Kg	☼	NC	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

Method: EPA 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 180-499070/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499152 — **Prep Batch: 499070**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.20		mg/Kg		07/07/25 07:02	07/08/25 11:36	1

Lab Sample ID: LCS 180-499070/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499152 — **Prep Batch: 499070**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	4.00	3.78		mg/Kg		94	90 - 110

Lab Sample ID: 180-192645-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499152 — **Prep Batch: 499070**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.80		11.6	11.3		mg/Kg	☼	90	90 - 110

Lab Sample ID: 180-192645-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499152 — **Prep Batch: 499070**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.80		11.4	11.3		mg/Kg	☼	92	90 - 110	0	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-192755-C-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499148

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	28		26.9		%		5	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

GC Semi VOA

Prep Batch: 499176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-1	250702010-01	Total/NA	Solid	3541	
MB 180-499176/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-499176/2-A	Lab Control Sample	Total/NA	Solid	3541	
480-230456-F-16-B MS	Matrix Spike	Total/NA	Solid	3541	
480-230456-F-16-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 499222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-1	250702010-01	Total/NA	Solid	EPA 8082A	499176
MB 180-499176/1-A	Method Blank	Total/NA	Solid	EPA 8082A	499176
LCS 180-499176/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	499176
480-230456-F-16-B MS	Matrix Spike	Total/NA	Solid	EPA 8082A	499176
480-230456-F-16-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	499176

Specialty Organics

Prep Batch: 677350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-1	250702010-01	Total/NA	Solid	HRMS-Soxtherm	
MB 410-677350/1-A	Method Blank	Total/NA	Solid	HRMS-Soxtherm	
LCS 410-677350/2-A	Lab Control Sample	Total/NA	Solid	HRMS-Soxtherm	

Analysis Batch: 677391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-677350/1-A	Method Blank	Total/NA	Solid	8290A	677350
LCS 410-677350/2-A	Lab Control Sample	Total/NA	Solid	8290A	677350

Analysis Batch: 678547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-1	250702010-01	Total/NA	Solid	8290A	677350

General Chemistry

Prep Batch: 499070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-1	250702010-01	Total/NA	Solid	Distill/Phenol	
MB 180-499070/1-A	Method Blank	Total/NA	Solid	Distill/Phenol	
LCS 180-499070/2-A	Lab Control Sample	Total/NA	Solid	Distill/Phenol	
180-192645-B-1-B MS	Matrix Spike	Total/NA	Solid	Distill/Phenol	
180-192645-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	Distill/Phenol	

Analysis Batch: 499148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-1	250702010-01	Total/NA	Solid	SM 2540G	
180-192734-2	250702010-02	Total/NA	Solid	SM 2540G	
180-192734-3	250702010-03	Total/NA	Solid	SM 2540G	
180-192755-C-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

Analysis Batch: 499152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-1	250702010-01	Total/NA	Solid	EPA 9065	499070
MB 180-499070/1-A	Method Blank	Total/NA	Solid	EPA 9065	499070

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-192734-1
SDG: 250702010

General Chemistry (Continued)

Analysis Batch: 499152 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-499070/2-A	Lab Control Sample	Total/NA	Solid	EPA 9065	499070
180-192645-B-1-B MS	Matrix Spike	Total/NA	Solid	EPA 9065	499070
180-192645-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9065	499070

Leach Batch: 668164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-2	250702010-02	ASTM Leach	Solid	D3987-85	

Prep Batch: 668584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-2	250702010-02	Total/NA	Solid	9071B	
MB 410-668584/1-A	Method Blank	Total/NA	Solid	9071B	
LCS 410-668584/2-A	Lab Control Sample	Total/NA	Solid	9071B	
460-329385-B-1-C MS	Matrix Spike	Total/NA	Solid	9071B	
480-329385-B-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	9071B	
460-329385-B-1-B DU	Duplicate	Total/NA	Solid	9071B	

Analysis Batch: 669203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-2	250702010-02	Total/NA	Solid	9071B	668584
MB 410-668584/1-A	Method Blank	Total/NA	Solid	9071B	668584
LCS 410-668584/2-A	Lab Control Sample	Total/NA	Solid	9071B	668584
460-329385-B-1-C MS	Matrix Spike	Total/NA	Solid	9071B	668584
460-329385-B-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	9071B	668584
460-329385-B-1-B DU	Duplicate	Total/NA	Solid	9071B	668584

Analysis Batch: 672540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192734-2	250702010-02	ASTM Leach	Solid	1664B	668164
MB 410-672540/1	Method Blank	Total/NA	Solid	1664B	
LCS 410-672540/2	Lab Control Sample	Total/NA	Solid	1664B	
LCSD 410-672540/3	Lab Control Sample Dup	Total/NA	Solid	1664B	
410-232172-B-2 MS	Matrix Spike	Total/NA	Solid	1664B	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250702010**

Additional Information : Quarterly Limed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: See attached Parameter List	HEM, ASTM HEM, % total solids	VOA EPA 8260D *	Total Solids		
							Number of Containers					
250702010-01	7/2/25	1103	S	N	G	Always maintain sample/extract at	1					
250702010-02	7/2/25	1103	S	N	G	25°C when reading any pH result.		1				
250702010-03	7/2/25	1103	S	N*	G	Solids must be analyzed by 2540G.			6	1		
						All methods must be accredited by						
						PADEP or NELAC.		J1	2.9			
						Email a copy of LIMS login with signed			-0.8			
						COC as soon as possible after receipt.		#20	2.1			
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-192734 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	7-3-25	1000		EUROFINS	7-3-25	1000
	EPTNE	7-3-25	1330		EPTNE	7/3/25	1330

COC Analyst Cooler Review: Initials: [illegible] Date: 7-3-25

Supervisor Review: Initials: [illegible] Date: 7 3 25

Contract Lab GRAB portion of Quarterly Analysis when shared with ALCOSAN Lab

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM & LIMED SLUDGE- QUARTERLY			
Check reporting limit requirements.	Quarterly	AMBER GRAB (1 Amber quart) PCBs * 2,3,7,8-TCDD* Phenolics * Solids, Total (SM2540G)* HEM GRAB (1 clear pint) Oil & Grease * Solids, Total (SM2540G)* ASTM Oil & Grease * VOA GRAB (1 vial + 1 jar for TS) 8260 Volatile Organics * Solids, Total (SM2540G)* Analyses done on a separate grab sample for each matrix.	Laboratory

Red indicates analyses performed by a contract laboratory

SEND 1 CLEAR PINT GRAB FOR HEM, 1 AMBER QUART GRAB FOR EACH LOCATION, AND 1 VOA VIAL GRAB WITH 1 JAR FOR TS)

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-541676.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-192734-1
Address: 2425 New Holland Pike,	Due Date Requested: 7/17/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8290A/HRMS_Soxtlm_P2,3,7,8-TCDD	9071B/9071B_P_Sox(MOD) HEM (Oil and Grease) mg/Kg dw	1664B_NP/ASTM_LEACH_NPHEM Only	8260D/5035FP_CalcAlcoam Volatile List	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
250702010-01 (180-192734-1)	7/2/25	11:03 Eastern	G	Solid			X				1	
250702010-02 (180-192734-2)	7/2/25	11:03 Eastern	G	Solid				X	X		1	
250702010-03 (180-192734-3)	7/2/25	11:03 Eastern	G	Solid						X	8	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 7/7/25 1400	Company: ELLE	Received by:	Date/Time: 7-7-25 15:58	Company: ELLE
Relinquished by:	Date/Time: 7-7-25 21:15	Company: ELLE	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 7/7/25 2115	Company:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: raw: 4.8 corr: 4.6

Ver: 10/10/2024
7/31/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192734-1
SDG Number: 250702010

Login Number: 192734
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192734-1
SDG Number: 250702010

Login Number: 192734
List Number: 2
Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/07/25 12:31 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192734-1
SDG Number: 250702010

Login Number: 192734
List Number: 3
Creator: Arroyo, Haley

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/08/25 09:20 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
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PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251009013 **Sample Date:** 10/9/2025

Sample ID Number: 251009013-08 **Sample Type:** COMPOSITE

Customer Sample Number: composite

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
COD	Contract Lab	EurofinsLancaster	10/21/2025	3000	mg/L	1500		
Cyanide, Total	Contract Lab	EurofinsPittsburgh	10/16/2025	73	ug/L	10		
Ammonia-Nitrogen	Contract Lab	EurofinsPittsburgh	10/15/2025	46	mg/L	5.0		
Nitrate, as Nitrogen	Contract Lab	EurofinsPittsburgh	10/15/2025	0.12	mg/L	0.10		
pH	Contract Lab	EurofinsPittsburgh	10/14/2025	10.82	SU	0.1		
ASTM pH Temperature	Contract Lab	EurofinsPittsburgh	10/14/2025	25.1	°C	0.1	!	Laboratory is not accredited for this parameter. See Eurofins report for details.
Sulfates	Contract Lab	EurofinsPittsburgh	10/15/2025	11	mg/L	1.0		
Total Solids	Contract Lab	EurofinsPittsburgh	10/15/2025	830	mg/L	20		
Total Volatile Solids	Contract Lab	EurofinsPittsburgh	10/15/2025	680	mg/L	10	!	Laboratory is not accredited for this parameter. . See Eurofins report for details.
Chemistry								
Cyanide, Total	Contract Lab	EurofinsPittsburgh	10/18/2025	<3.8	mg/kg dry	3.8		
Contract Lab								
Ignitability	Contract Lab	EurofinsLancaster	10/22/2025	>200	°F	50		

Printed Date
Friday, November 14, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251009013 **Sample Date:** 10/9/2025

Sample ID Number: 251009013-08 **Sample Type:** COMPOSITE

Customer Sample Number: composite

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chlordane	Contract Lab	EurofinsPittsburgh	10/18/2025	<260	ug/Kg Dry	260		
Herbicides	Contract Lab	EurofinsPittsburgh	10/14/2025	See attached report	ug/Kg Dry			
Paint Filter Test	Contract Lab	EurofinsPittsburgh	10/14/2025	CNF		0.10		Contains No Free Liquid
Reactive Cyanide	Contract Lab	EurofinsLancaster	10/23/2025	<90	mg/kg	90		
Reactive Sulfide	Contract Lab	EurofinsLancaster	10/22/2025	<160	mg/kg	160		
Total Sulfide	Contract Lab	EurofinsCleveland	10/15/2025	230	mg/kg dry	91		
Toxaphene	Contract Lab	EurofinsPittsburgh	10/18/2025	<1000	ug/Kg Dry	1000		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	10/13/2025	33	%	0.50		
Daily 2								
pH	SW846 9045D	bbatson, agavran	10/9/2025	12.40	s.u.			
Extractable Organics								
8270 BNA	Contract Lab	EurofinsPittsburgh	10/14/2025	See attached Report	ug/Kg Dry			
Pesticides	Contract Lab	EurofinsPittsburgh	10/18/2025	See attached report	ug/Kg Dry			
TCLP								
Boron	Contract Lab	EurofinsLancaster	10/20/2025	<0.50	mg/L	0.50		
Herbicides	Contract Lab	EurofinsPittsburgh	10/16/2025	See attached report	mg/L			

Printed Date
Friday, November 14, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251009013 **Sample Date:** 10/9/2025

Sample ID Number: 251009013-08 **Sample Type:** COMPOSITE

Customer Sample Number: composite

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
608 Pesticides	Contract Lab	EurofinsPittsburgh	10/17/2025	See Attached	mg/L			
TCLP BNA	Contract Lab	EurofinsPittsburgh	10/15/2025	See attached report	mg/L			
TCLP Volatile Organics	Contract Lab	EurofinsLancaster	10/23/2025	See Attached	mg/L			
Aluminum	Contract Lab	EurofinsLancaster	10/20/2025	6.5	mg/L	0.25		
Chloradane	Contract Lab	EurofinsPittsburgh	10/17/2025	<0.0050	mg/L	0.0050		
Arsenic	Contract Lab	EurofinsLancaster	10/20/2025	<0.020	mg/L	0.020		
Barium	Contract Lab	EurofinsLancaster	10/20/2025	0.38	mg/L	0.020		
Cadmium	Contract Lab	EurofinsLancaster	10/20/2025	<0.0050	mg/L	0.0050		
Chromium	Contract Lab	EurofinsLancaster	10/20/2025	<0.020	mg/L	0.020		
Copper	Contract Lab	EurofinsLancaster	10/20/2025	0.20	mg/L	0.10	B	Analyte was found in the blank.
Silver	Contract Lab	EurofinsLancaster	10/20/2025	<0.0050	mg/L	0.0050		
Toxaphene	Contract Lab	EurofinsPittsburgh	10/17/2025	<0.040	mg/L	0.040		
Molybdenum	Contract Lab	EurofinsLancaster	10/20/2025	0.11	mg/L	0.0050		
Nickel	Contract Lab	EurofinsLancaster	10/20/2025	0.14	mg/L	0.010	^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
Lead	Contract Lab	EurofinsLancaster	10/20/2025	<0.0050	mg/L	0.0050		

Printed Date
Friday, November 14, 2025

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Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251009013 **Sample Date:** 10/9/2025

Sample ID Number: 251009013-08 **Sample Type:** COMPOSITE

Customer Sample Number: composite

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Antimony	Contract Lab	EurofinsLancaster	10/20/2025	<0.010	mg/L	0.010		
Selenium	Contract Lab	EurofinsLancaster	10/20/2025	0.017	mg/L	0.010		
Zinc	Contract Lab	EurofinsLancaster	10/20/2025	<0.10	mg/L	0.10		
Mercury	Contract Lab	EurofinsLancaster	10/20/2025	<0.00020	mg/L	0.00020		

Data Qualifier	Data Qualifier Description
B	Similar concentration found in field/method blank

Comments:

Sample composited on October 9 from grabs collected oct 1,oct 2, oct 5, oct 6, oct 7, oct 8, oct 9

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037
EurofinsCleveland	PADEP 68-00340

"ALCOSAN Laboratory reported SW846 9045D pH results are corrected to 25 deg. C using a temperature correction calculation"

Released by:

Larissa Haver

11-14-25

Date

Printed Date
Friday, November 14, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251009013 **Sample Date:** 10/9/2025

Sample ID Number: 251009013-08A **Sample Type:** COMPOSITE

Customer Sample Number: compositeA

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Fixed Solids	SM 2540G - 2015	snixon	10/10/2025	45.11	%			
Percent Total Solids	SM 2540G - 2015	snixon	10/10/2025	32.3	%			
Percent Volatile Solids	SM 2540G - 2015	snixon	10/10/2025	54.89	%			

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on October 9 from grabs collected oct 1,oct 2, oct 5, oct 6, oct 7, oct 8, oct 9

Released by:

Larissa Hawel

11-14-25

Date

Printed Date
Friday, November 14, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 10/24/2025 12:36:29 PM

JOB DESCRIPTION

Quarterly Limed Sludge
251009013

JOB NUMBER

180-197031-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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10/24/2025 12:36:29 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 6
Certification Summary 8
Sample Summary 9
Method Summary 10
Lab Chronicle 11
Client Sample Results 14
QC Sample Results 19
QC Association Summary 46
Chain of Custody 54
Receipt Checklists 61

Job Narrative
180-197031-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 10/10/2025 12:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 1.0°C.

Comments
The following is the pH to an additional decimal place for 9040C/ASTM: 10.82
The following test was analyzed on a water following ASTM Leach of the sludge. The lab is certified for this method in Non-Potable Water - SM2540E

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Method 8260D - TCLP: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: 251009013-08 (180-197031-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) analyzed in 180-504504 was outside the method criteria for the following analyte(s): 4,6-Dinitro-2-methylphenol, Di-n-octyl phthalate, Caprolactam, 2,4,5-Trichlorophenol and 2,4,6-Trichlorophenol. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The following sample was diluted due to the nature of the sample matrix: 251009013-08 (180-197031-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
Method 8151A: The continuing calibration verification (CCV) associated with 180-504500 recovered high and outside the control limits for 2,4,5-T on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCV 180-504500/12).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides
Method 8081B: The continuing calibration verification (CCV) associated with 180-504797 recovered low and outside the control limits for cis-Chlordane and Endosulfan I on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCVIS 180-504797/6).

Method 8081B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 180-504628 and analytical batch 180-504797 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix

Job ID: 180-197031-1 (Continued)

Eurofins Pittsburgh

interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8081B: The following sample was diluted due to the nature of the sample matrix: 251009013-08 (180-197031-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 9056A_ORGFM_48H - ASTM Leach: The following sample was diluted due to the nature of the sample matrix: 251009013-08 (180-197031-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 6020B - TCLP: The TCLP leachate blank for batch 410-714865 contained Copper above the reporting limit (RL). This target analyte concentration was less than the TCLP Regulatory Limit. The associated samples were also below the TCLP Regulatory Limit for this analyte; therefore, re-extraction was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 1010B: The Pensky Martens closed cup apparatus is designed to determine the flash point of a liquid sample. The sample submitted could not be mixed well enough to obtain uniform heating. The temperature being measured was that of the material near the top of the cup. The material at the bottom of the cup could have a higher temperature. The temperature reported may not be accurate.

Method 350.1 - ASTM Leach: The following sample was diluted to bring the concentration of target analytes within the calibration range: 251009013-08 (180-197031-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
FH	MS and/or MSD recovery above control limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Result is less then the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
FL	MS and/or MSD recovery below control limits.

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Analyte was found in the blank.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.

General Chemistry

Qualifier	Qualifier Description
!	Laboratory is not accredited for this parameter.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
F3	Duplicate RPD exceeds the control limit
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 9040C		Solid	Temperature
SM 2540E		Solid	Total Volatile Solids

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	68-00340	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-197031-1	251009013-08	Solid	10/09/25 09:57	10/10/25 12:50	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
8010D	Metals (ICP)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
1010B	Ignitability, Pensky-Martens Closed-Cup Method	SW846	ELLE
350.1_GD	Ammonia by Gas Diffusion	EPA	EET PIT
410.4	COD	EPA	ELLE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CLE
9034	Sulfide, Reactive	SW846	ELLE
EPA 9014	Cyanide	SW846	EET PIT
EPA 9040C	pH	SW846	EET PIT
EPA 9095B	Paint Filter	SW846	EET PIT
SM 2540B	Total Solids	SM	EET PIT
SM 2540E	Solids, Volatile and Fixed (VS)	SM	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
1311	TCLP Extraction	SW846	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
5030C	Purge and Trap	SW846	ELLE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET PIT
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CLE
D3987-85	ASTM Leaching Procedure	ASTM	EET PIT
D3987-85	ASTM Leaching Procedure	ASTM	ELLE
EPA 1311	TCLP Extraction	SW846	EET PIT

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Client Sample ID: 251009013-08
Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197031-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25.0 g	140 mL	717312	10/21/25 14:04	UNWS	ELLE
TCLP	Analysis	8260D		50	5 mL	5 mL	718670	10/23/25 14:41	ULCP	ELLE
	Instrument ID: 9355									
TCLP	Leach	EPA 1311			100.03 g	2000 mL	504444	10/13/25 11:25	Z1M	EET PIT
TCLP	Prep	3510C			200 mL	10.0 mL	504560	10/14/25 22:31	VJC	EET PIT
TCLP	Analysis	EPA 8270E		1	1 mL	1 mL	504588	10/15/25 13:26	VVP	EET PIT
	Instrument ID: CH751									
TCLP	Leach	EPA 1311			100.03 g	2000 mL	504444	10/13/25 11:25	Z1M	EET PIT
TCLP	Prep	3510C			100 mL	40.0 mL	504561	10/14/25 22:36	VJC	EET PIT
TCLP	Analysis	EPA 8081B		1			504741	10/17/25 15:09	SJM	EET PIT
	Instrument ID: CHGC15									
TCLP	Leach	EPA 1311			100.03 g	2000 mL	504444	10/13/25 11:25	Z1M	EET PIT
TCLP	Prep	8151A			100 mL	10.0 mL	504559	10/14/25 22:28	VJC	EET PIT
TCLP	Analysis	EPA 8151A		20	1 mL	1 mL	504663	10/16/25 10:01	SJM	EET PIT
	Instrument ID: CGC1									
ASTM Leach	Leach	D3987-85			50.06 g	1000 mL	504432	10/13/25 08:37	Z1M	EET PIT
ASTM Leach	Analysis	EPA 9056A		1	1 mL	1 mL	504507	10/15/25 07:49	ERP	EET PIT
	Instrument ID: INTEGRION									
TCLP	Leach	1311			100.2 g	2000 mL	714865	10/18/25 15:15	UNWS	ELLE
TCLP	Prep	3005A			5 mL	50 mL	716445	10/20/25 07:05	UJL8	ELLE
TCLP	Analysis	6010D		1			717005	10/20/25 15:44	T8CQ	ELLE
	Instrument ID: T73 - 18255									
TCLP	Leach	1311			100.2 g	2000 mL	714865	10/18/25 15:15	UNWS	ELLE
TCLP	Prep	3005A			5 mL	50 mL	716445	10/20/25 07:05	UJL8	ELLE
TCLP	Analysis	6020B		1			716763	10/20/25 12:20	F7JF	ELLE
	Instrument ID: E09 - 30921									
TCLP	Leach	1311			100.2 g	2000 mL	714865	10/16/25 15:15	UNWS	ELLE
TCLP	Prep	7470A			20 mL	20 mL	716448	10/20/25 07:45	UJL8	ELLE
TCLP	Analysis	7470A		1			717006	10/20/25 15:00	IJ3I	ELLE
	Instrument ID: M16									
Total/NA	Analysis	1010B		1	75 g	75 g	717819	10/22/25 06:07	USAE	ELLE
	Instrument ID: NOEQUIP						Completed:	10/22/25 06:07 [1]		
ASTM Leach	Leach	D3987-85			50.06 g	1000 mL	504432	10/13/25 08:37	Z1M	EET PIT
ASTM Leach	Analysis	350.1_GD		50			504642	10/15/25 15:12	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									
ASTM Leach	Leach	D3987-85			70.18 g	1400 mL	714243	10/15/25 14:02	UNWS	ELLE
ASTM Leach	Analysis	410.4		20	2 mL	2 mL	717316	10/21/25 07:52	USAE	ELLE
	Instrument ID: 11078H									
Total/NA	Prep	7.3.4			9.95 g	500 mL	717865	10/22/25 07:17	USAE	ELLE
Total/NA	Analysis	9012		1			718798	10/23/25 00:28	UJE2	ELLE
	Instrument ID: S0027									
Total/NA	Prep	7.3.4			9.95 g	500 mL	717865	10/22/25 07:17	USAE	ELLE
Total/NA	Analysis	9034		1	200 mL	200 mL	718066	10/22/25 10:58	USAE	ELLE
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Client Sample ID: 251009013-08

Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197031-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			50.06 g	1000 mL	504432	10/13/25 08:37	Z1M	EET PIT
ASTM Leach	Prep	9010C			10 mL	10 mL	504690	10/16/25 12:32	RAO	EET PIT
ASTM Leach	Analysis	EPA 9014		1			504723	10/16/25 17:08	RAO	EET PIT
	Instrument ID: JAWS									
ASTM Leach	Leach	D3987-85			50.06 g	1000 mL	504432	10/13/25 08:37	Z1M	EET PIT
ASTM Leach	Analysis	EPA 9040C		1			504544	10/14/25 16:22	RAO	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	EPA 9095B		1			504547	10/14/25 16:12	LWM	EET PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			50.06 g	1000 mL	504432	10/13/25 08:37	Z1M	EET PIT
ASTM Leach	Analysis	SM 2540B		1	50 mL	100 mL	504643	10/15/25 17:50	A1K	EET PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			50.06 g	1000 mL	504432	10/13/25 08:37	Z1M	EET PIT
ASTM Leach	Analysis	SM 2540E		1	50 mL	100 mL	504644	10/15/25 17:50	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540G		1			504468	10/13/25 17:36	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251009013-08

Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197031-1

Matrix: Solid
Percent Solids: 33.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.3 g	5.0 mL	504492	10/14/25 05:38	MKK	EET PIT
Total/NA	Analysis	EPA 8270E		4	1 mL	1 mL	504504	10/14/25 17:17	VVP	EET PIT
	Instrument ID: CH733									
Total/NA	Prep	3541			15.0 g	20.0 mL	504628	10/15/25 15:11	DVC	EET PIT
Total/NA	Analysis	EPA 8081B		5			504797	10/18/25 13:19	SJM	EET PIT
	Instrument ID: CHGC15									
Total/NA	Prep	8151A			10.2 g	40.0 mL	504392	10/12/25 00:47	VJC	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	504500	10/14/25 10:42	SJM	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	9030B			4.98 mL	50 mL	676179	10/15/25 12:55	VH6H	EET CLE
Total/NA	Analysis	9034		1			676223	10/15/25 17:10	VH6H	EET CLE
	Instrument ID: 40311									
Total/NA	Prep	9010C			0.08 g	10 mL	504688	10/16/25 11:53	RAO	EET PIT
Total/NA	Analysis	EPA 9014		1			504800	10/18/25 12:05	RAO	EET PIT
	Instrument ID: SHAMU									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Analyst References:

Lab: EET CLE
- Batch Type: Prep
  - VH6H = Adriana Carper
- Batch Type: Analysis
  - VH6H = Adriana Carper

Lab: EET PIT
- Batch Type: Leach
  - Z1M = Zee Menakruzz
- Batch Type: Prep
  - DVC = Daniel Capodanno
  - MKK = Mary Kenny
  - RAO = Rachel Oster
  - VJC = Vincent Cervone
- Batch Type: Analysis
  - A1K = Agnes Komlos
  - BAB = Brooke Batyl
  - ELS = Edwin Shireman
  - ERP = Evan Papak
  - LWM = Leslie McIntire
  - RAO = Rachel Ostar
  - SJM = Shannon Mueller
  - VVP = Vincent Piccolino

Lab: ELLE
- Batch Type: Leach
  - UNWS = Nicholas Shroyer
- Batch Type: Prep
  - UJL8 = James Mertz
  - USAE = Susan Engle
- Batch Type: Analysis
  - F7JF = Dennis Dick
  - IJ3I = Elizabeth Brittingham
  - T8CQ = Sera Bargo
  - UJE2 = Joseph McKenzie
  - ULCP = Linda Pape
  - USAE = Susan Engle

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Client Sample ID: 251009013-08
Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197031-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.050		mg/L			10/23/25 14:41	50
1,2-Dichloroethane	ND		0.050		mg/L			10/23/25 14:41	50
2-Butanone (MEK)	ND		0.50		mg/L			10/23/25 14:41	50
Benzene	ND		0.050		mg/L			10/23/25 14:41	50
Carbon tetrachloride	ND		0.050		mg/L			10/23/25 14:41	50
Chlorobenzene	ND		0.050		mg/L			10/23/25 14:41	50
Chloroform	ND		0.050		mg/L			10/23/25 14:41	50
Naphthalene	ND		0.25		mg/L			10/23/25 14:41	50
Tetrachloroethene	ND		0.050		mg/L			10/23/25 14:41	50
Trichloroethene	ND		0.050		mg/L			10/23/25 14:41	50
Vinyl chloride	ND		0.050		mg/L			10/23/25 14:41	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*10/23/25 14:41*	*50*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*10/23/25 14:41*	*50*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*10/23/25 14:41*	*50*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/23/25 14:41*	*50*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Acenaphthylene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Acetophenone	ND		7900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Anthracene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Atrazine	ND		7900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Benzaldehyde	ND		7900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Benzo[a]anthracene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Benzo[b]fluoranthene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Benzo[k]fluoranthene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Benzo[g,h,i]perylene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Benzo[a]pyrene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
1,1'-Biphenyl	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Bis(2-chloroethoxy)methane	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Bis(2-chloroethyl)ether	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2,2'-oxybis[1-chloropropane]	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Bis(2-ethylhexyl) phthalate	ND		39000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
4-Bromophenyl phenyl ether	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Butyl benzyl phthalate	ND		20000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Caprolactam	ND	^c	20000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Carbazole	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
4-Chloroaniline	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
4-Chloro-3-methylphenol	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2-Chloronaphthalene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2-Chlorophenol	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
4-Chlorophenyl phenyl ether	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Chrysene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Dibenz(a,h)anthracene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Dibenzofuran	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Di-n-butyl phthalate	ND		39000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
3,3'-Dichlorobenzidine	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Client Sample ID: 251009013-08
Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197031-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Diethyl phthalate	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2,4-Dimethylphenol	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Dimethyl phthalate	ND		7900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
4,6-Dinitro-2-methylphenol	ND	^c	20000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2,4-Dinitrophenol	ND		39000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2,4-Dinitrotoluene	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2,6-Dinitrotoluene	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Di-n-octyl phthalate	ND	^c	3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Fluoranthene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Fluorene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Hexachlorobenzene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Hexachlorobutadiene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Hexachlorocyclopentadiene	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Hexachloroethane	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Indeno[1,2,3-cd]pyrene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Isophorone	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2-Methylnaphthalene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2-Methylphenol	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Methylphenol, 3 & 4	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Naphthalene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2-Nitroaniline	ND		20000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
3-Nitroaniline	ND		20000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
4-Nitroaniline	ND		20000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Nitrobenzene	ND		7900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2-Nitrophenol	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
4-Nitrophenol	ND		20000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
N-Nitrosodiphenylamine	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
N-Nitrosodi-n-propylamine	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Pentachlorophenol	ND		20000		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Phenanthrene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Phenol	ND		3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
Pyrene	ND		790		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2,4,5-Trichlorophenol	ND	^c	3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4
2,4,6-Trichlorophenol	ND	^c	3900		ug/Kg	☼	10/14/25 05:38	10/14/25 17:17	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*44 - 105*	*10/14/25 05:38*	*10/14/25 17:17*	*4*
2-Fluorophenol	*56*		*48 - 105*	*10/14/25 05:38*	*10/14/25 17:17*	*4*
2,4,6-Tribromophenol	*50*		*34 - 108*	*10/14/25 05:38*	*10/14/25 17:17*	*4*
Nitrobenzene-d5	*62*		*46 - 105*	*10/14/25 05:38*	*10/14/25 17:17*	*4*
Phenol-d5	*67*		*46 - 105*	*10/14/25 05:38*	*10/14/25 17:17*	*4*
Terphenyl-d14	*71*		*39 - 105*	*10/14/25 05:38*	*10/14/25 17:17*	*4*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1
2,4-Dinitrotoluene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1
Hexachlorobenzene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1
Hexachlorobutadiene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Client Sample ID: 251009013-08
Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197031-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1
2-Methylphenol	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1
Methylphenol, 3 & 4	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1
Nitrobenzene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1
Pentachlorophenol	ND		0.25		mg/L		10/14/25 22:31	10/15/25 13:26	1
Pyridine	ND		0.10		mg/L		10/14/25 22:31	10/15/25 13:26	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		10/14/25 22:31	10/15/25 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*10 - 130*	*10/14/25 22:31*	*10/15/25 13:26*	*1*
2-Fluorophenol	*89*		*10 - 130*	*10/14/25 22:31*	*10/15/25 13:26*	*1*
2,4,6-Tribromophenol	*78*		*10 - 130*	*10/14/25 22:31*	*10/15/25 13:26*	*1*
Nitrobenzene-d5	*93*		*10 - 130*	*10/14/25 22:31*	*10/15/25 13:26*	*1*
Phenol-d5	*92*		*10 - 130*	*10/14/25 22:31*	*10/15/25 13:26*	*1*
Terphenyl-d14	*82*		*10 - 130*	*10/14/25 22:31*	*10/15/25 13:26*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
alpha-BHC	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
beta-BHC	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
delta-BHC	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
gamma-BHC (Lindane)	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
cis-Chlordane	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
trans-Chlordane	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
4,4'-DDD	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Chlordane (technical)	ND		260		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
4,4'-DDE	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
4,4'-DDT	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Dieldrin	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Endosulfan I	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Endosulfan II	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Endosulfan sulfate	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Endrin	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Endrin aldehyde	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Endrin ketone	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Heptachlor	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Heptachlor epoxide	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Methoxychlor	ND		26		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5
Toxaphene	ND		1000		ug/Kg	☼	10/15/25 15:11	10/18/25 13:19	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*53 - 124*	*10/15/25 15:11*	*10/18/25 13:19*	*5*
Tetrachloro-m-xylene	*86*		*53 - 124*	*10/15/25 15:11*	*10/18/25 13:19*	*5*
DCB Decachlorobiphenyl (Surr)	*74*		*36 - 142*	*10/15/25 15:11*	*10/18/25 13:19*	*5*
DCB Decachlorobiphenyl (Surr)	*84*		*36 - 142*	*10/15/25 15:11*	*10/18/25 13:19*	*5*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Client Sample ID: 251009013-08
Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197031-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050		mg/L		10/14/25 22:36	10/17/25 15:09	1
Endrin	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:09	1
gamma-BHC (Lindane)	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:09	1
Heptachlor	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:09	1
Heptachlor epoxide	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:09	1
Methoxychlor	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:09	1
Toxaphene	ND		0.040		mg/L		10/14/25 22:36	10/17/25 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*84*		*33 - 120*	*10/14/25 22:36*	*10/17/25 15:09*	*1*
DCB Decachlorobiphenyl (Surr)	*82*		*33 - 120*	*10/14/25 22:36*	*10/17/25 15:09*	*1*
Tetrachloro-m-xylene	*94*		*15 - 141*	*10/14/25 22:36*	*10/17/25 15:09*	*1*
Tetrachloro-m-xylene	*91*		*15 - 141*	*10/14/25 22:36*	*10/17/25 15:09*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		240		ug/Kg	☼	10/12/25 00:47	10/14/25 10:42	1
2,4,5-T	ND		59		ug/Kg	☼	10/12/25 00:47	10/14/25 10:42	1
Silvex (2,4,5-TP)	ND		59		ug/Kg	☼	10/12/25 00:47	10/14/25 10:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*75*		*13 - 111*	*10/12/25 00:47*	*10/14/25 10:42*	*1*
2,4-Dichlorophenylacetic acid	*85*		*13 - 111*	*10/12/25 00:47*	*10/14/25 10:42*	*1*

Method: SW846 EPA 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040		mg/L		10/14/25 22:28	10/16/25 10:01	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		10/14/25 22:26	10/16/25 10:01	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*70*		*13 - 111*	*10/14/25 22:28*	*10/16/25 10:01*	*20*
2,4-Dichlorophenylacetic acid	*77*		*13 - 111*	*10/14/25 22:28*	*10/16/25 10:01*	*20*

Method: SW846 EPA 9056A - Anions, Ion Chromatography - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**11**		1.0		mg/L			10/15/25 07:49	1
Nitrate as N	**0.12**		0.10		mg/L			10/15/25 07:49	1

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		10/20/25 07:05	10/20/25 15:44	1

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6.5**		0.25		mg/L		10/20/25 07:05	10/20/25 12:20	1
Arsenic	ND		0.020		mg/L		10/20/25 07:05	10/20/25 12:20	1
Barium	**0.38**		0.020		mg/L		10/20/25 07:05	10/20/25 12:20	1
Cadmium	ND		0.0050		mg/L		10/20/25 07:05	10/20/25 12:20	1
Chromium	ND		0.020		mg/L		10/20/25 07:05	10/20/25 12:20	1
Copper	**0.20**	**B**	0.010		mg/L		10/20/25 07:05	10/20/25 12:20	1
Silver	ND		0.0050		mg/L		10/20/25 07:05	10/20/25 12:20	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Client Sample ID: 251009013-08
Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197031-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 6020B - Metals (ICP/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	**0.11**		0.0050		mg/L		10/20/25 07:05	10/20/25 12:20	1
Nickel	**0.14**	^2	0.010		mg/L		10/20/25 07:05	10/20/25 12:20	1
Lead	ND		0.0050		mg/L		10/20/25 07:05	10/20/25 12:20	1
Antimony	ND		0.010		mg/L		10/20/25 07:05	10/20/25 12:20	1
Selenium	**0.017**		0.010		mg/L		10/20/25 07:05	10/20/25 12:20	1
Zinc	ND		0.10		mg/L		10/20/25 07:05	10/20/25 12:20	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		10/20/25 07:45	10/20/25 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	**>200**		50		Degrees F			10/22/25 06:07	1
Cyanide, Reactive (SW846 9012)	ND		90		mg/Kg		10/22/25 07:17	10/23/25 00:28	1
Sulfide (SW846 9034)	**230**		91		mg/Kg	☼	10/15/25 12:55	10/15/25 17:10	1
Sulfide, Reactive (SW846 9034)	ND		160		mg/Kg		10/22/25 07:17	10/22/25 10:58	1
Cyanide, Total (SW846 EPA 9014)	ND		3.8		mg/Kg	☼	10/16/25 11:53	10/18/25 12:05	1
Free Liquid (SW846 EPA 9095B)	**CNF**		0.10		NONE			10/14/25 16:12	1
Total Solids (SM 2540G)	**33**		0.50		%			10/13/25 17:36	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled (EPA 350.1_GD)	**46**		5.0		mg/L			10/15/25 15:12	50
Chemical Oxygen Demand (EPA 410.4)	**3000**		1500		mg/L			10/21/25 07:52	20
Cyanide, Total (SW846 EPA 9014)	**73**		10		ug/L		10/16/25 12:32	10/16/25 17:08	1
pH (SW846 EPA 9040C)	**10.8**		0.1		SU			10/14/25 16:22	1
Temperature (SW846 EPA 9040C)	**25.1**	!	0.1		Degrees C			10/14/25 16:22	1
Total Solids (SM 2540B)	**830**		20		mg/L			10/15/25 17:50	1
Total Volatile Solids (SM 2540E)	**680**	!	20		mg/L			10/15/25 17:50	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-718670/7
Matrix: Solid
Analysis Batch: 718670

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010		mg/L			10/23/25 12:10	1
1,2-Dichloroethane	ND		0.0010		mg/L			10/23/25 12:10	1
2-Butanone (MEK)	ND		0.010		mg/L			10/23/25 12:10	1
Benzene	ND		0.0010		mg/L			10/23/25 12:10	1
Carbon tetrachloride	ND		0.0010		mg/L			10/23/25 12:10	1
Chlorobenzene	ND		0.0010		mg/L			10/23/25 12:10	1
Chloroform	ND		0.0010		mg/L			10/23/25 12:10	1
Naphthalene	ND		0.0050		mg/L			10/23/25 12:10	1
Tetrachloroethene	ND		0.0010		mg/L			10/23/25 12:10	1
Trichloroethene	ND		0.0010		mg/L			10/23/25 12:10	1
Vinyl chloride	ND		0.0010		mg/L			10/23/25 12:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*10/23/25 12:10*	*1*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*10/23/25 12:10*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*10/23/25 12:10*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/23/25 12:10*	*1*

Lab Sample ID: LCS 410-718670/4
Matrix: Solid
Analysis Batch: 718670

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	0.0200	0.0231		mg/L		116	80 - 131
1,2-Dichloroethane	0.0200	0.0183		mg/L		92	73 - 124
2-Butanone (MEK)	0.250	0.207		mg/L		83	59 - 135
Benzene	0.0200	0.0191		mg/L		98	80 - 120
Carbon tetrachloride	0.0200	0.0199		mg/L		100	64 - 134
Chlorobenzene	0.0200	0.0199		mg/L		99	80 - 120
Chloroform	0.0200	0.0198		mg/L		99	80 - 120
Naphthalene	0.0200	0.0182		mg/L		91	67 - 124
Tetrachloroethene	0.0200	0.0191		mg/L		96	80 - 120
Trichloroethene	0.0200	0.0194		mg/L		97	80 - 120
Vinyl chloride	0.0200	0.0198		mg/L		99	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 410-718670/5
Matrix: Solid
Analysis Batch: 718670

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	0.0200	0.0229		mg/L		114	80 - 131	1	30
1,2-Dichloroethane	0.0200	0.0185		mg/L		92	73 - 124	1	30

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-718670/5
Matrix: Solid
Analysis Batch: 718670

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Butanone (MEK)	0.250	0.209		mg/L		84	59 - 135	1	30
Benzene	0.0200	0.0190		mg/L		95	80 - 120	1	30
Carbon tetrachloride	0.0200	0.0197		mg/L		98	64 - 134	1	30
Chlorobenzene	0.0200	0.0199		mg/L		99	80 - 120	0	30
Chloroform	0.0200	0.0195		mg/L		98	80 - 120	2	30
Naphthalene	0.0200	0.0183		mg/L		92	67 - 124	1	30
Tetrachloroethene	0.0200	0.0194		mg/L		97	80 - 120	1	30
Trichloroethene	0.0200	0.0188		mg/L		94	80 - 120	3	30
Vinyl chloride	0.0200	0.0194		mg/L		97	56 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 180-197197-A-1-C MS
Matrix: Solid
Analysis Batch: 718670

Client Sample ID: Matrix Spike
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	ND	FH	0.400	0.516	FH	mg/L		129	74 - 121
1,2-Dichloroethane	ND		0.400	0.370		mg/L		93	69 - 120
2-Butanone (MEK)	ND		5.00	3.95		mg/L		79	65 - 131
Benzene	ND		0.400	0.400		mg/L		100	81 - 120
Carbon tetrachloride	ND		0.400	0.440		mg/L		110	63 - 128
Chlorobenzene	ND		0.400	0.414		mg/L		103	80 - 120
Chloroform	ND		0.400	0.419		mg/L		105	74 - 120
Naphthalene	ND		0.400	0.344		mg/L		86	62 - 120
Tetrachloroethene	ND		0.400	0.427		mg/L		107	68 - 125
Trichloroethene	ND		0.400	0.402		mg/L		100	76 - 120
Vinyl chloride	ND		0.400	0.464		mg/L		116	52 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 180-197197-A-1-C MSD
Matrix: Solid
Analysis Batch: 718670

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	ND	FH	0.400	0.532	FH	mg/L		133	74 - 121	3	30
1,2-Dichloroethane	ND		0.400	0.380		mg/L		95	69 - 120	3	30
2-Butanone (MEK)	ND		5.00	4.20		mg/L		84	65 - 131	6	30
Benzene	ND		0.400	0.411		mg/L		103	81 - 120	3	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-197197-A-1-C MSD
Matrix: Solid
Analysis Batch: 718670

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon tetrachloride	ND		0.400	0.460		mg/L		115	63 - 128	4	30
Chlorobenzene	ND		0.400	0.426		mg/L		107	80 - 120	3	30
Chloroform	ND		0.400	0.433		mg/L		108	74 - 120	3	30
Naphthalene	ND		0.400	0.370		mg/L		93	62 - 120	7	30
Tetrachloroethene	ND		0.400	0.421		mg/L		105	88 - 125	1	30
Trichloroethene	ND		0.400	0.418		mg/L		105	76 - 120	4	30
Vinyl chloride	ND		0.400	0.439		mg/L		110	52 - 120	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-504492/1-A
Matrix: Solid
Analysis Batch: 504504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 504492

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Acenaphthylene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Acetophenone	ND		670		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Anthracene	ND		87		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Atrazine	ND		670		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Benzaldehyde	ND		670		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Benzo[a]anthracene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Benzo[b]fluoranthene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Benzo[k]fluoranthene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Benzo[g,h,i]perylene	ND		87		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Benzo[a]pyrene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
1,1'-Biphenyl	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Bis(2-chloroethyl)ather	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2,2'-oxybis[1-chloropropane]	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Bis(2-ethylhexyl) phthalate	ND		3300		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Butyl benzyl phthalate	ND		1700		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Caprolactam	ND		1700		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Carbazole	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
4-Chloroaniline	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2-Chloronaphthalene	ND		87		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2-Chlorophenol	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Chrysene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Dibenz(a,h)anthracene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Dibenzofuran	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-504492/1-A
Matrix: Solid
Analysis Batch: 504504

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 504492

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		3300		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
3,3'-Dichlorobenzidine	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2,4-Dichlorophenol	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Diethyl phthalate	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2,4-Dimethylphenol	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Dimethyl phthalate	ND		670		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
4,6-Dinitro-2-methylphenol	ND		1700		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2,4-Dinitrophenol	ND		3300		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2,4-Dinitrotoluene	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2,6-Dinitrotoluene	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Di-n-octyl phthalate	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Fluoranthene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Fluorene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Hexachlorobenzene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Hexachlorobutadiene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Hexachlorocyclopentadiene	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Hexachloroethane	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Indeno[1,2,3-cd]pyrene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Isophorone	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2-Methylnaphthalene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2-Methylphenol	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Methylphenol, 3 & 4	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Naphthalene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2-Nitroaniline	ND		1700		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
3-Nitroaniline	ND		1700		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
4-Nitroaniline	ND		1700		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Nitrobenzene	ND		670		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2-Nitrophenol	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
4-Nitrophenol	ND		1700		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
N-Nitrosodiphenylamine	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
N-Nitrosodi-n-propylamine	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Pentachlorophenol	ND		1700		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Phenanthrene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Phenol	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
Pyrene	ND		67		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1
2,4,6-Trichlorophenol	ND		330		ug/Kg		10/14/25 05:38	10/14/25 11:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*44 - 105*	*10/14/25 05:38*	*10/14/25 11:35*	*1*
2-Fluorophenol	*71*		*48 - 105*	*10/14/25 05:38*	*10/14/25 11:35*	*1*
2,4,6-Tribromophenol	*74*		*34 - 108*	*10/14/25 05:38*	*10/14/25 11:35*	*1*
Nitrobenzene-d5	*66*		*46 - 105*	*10/14/25 05:38*	*10/14/25 11:35*	*1*
Phenol-d5	*73*		*46 - 105*	*10/14/25 05:38*	*10/14/25 11:35*	*1*
Terphenyl-d14	*72*		*39 - 105*	*10/14/25 05:38*	*10/14/25 11:35*	*1*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-504492/2-A
Matrix: Solid
Analysis Batch: 504504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 504492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	6670	4990		ug/Kg		75	50 - 100
Acenaphthylene	6670	5140		ug/Kg		77	52 - 100
Acetophenone	6670	5090		ug/Kg		76	48 - 100
Anthracene	6670	5200		ug/Kg		78	53 - 100
Atrazine	6670	5820		ug/Kg		87	49 - 103
Benzaldehyde	6670	4840		ug/Kg		73	23 - 105
Benzo[a]anthracene	6670	5190		ug/Kg		78	51 - 100
Benzo[b]fluoranthene	6870	5250		ug/Kg		79	48 - 100
Benzo[k]fluoranthene	6670	5190		ug/Kg		78	19 - 100
Benzo[g,h,i]perylene	6670	4700		ug/Kg		70	48 - 105
Benzo[a]pyrene	6670	5200		ug/Kg		78	51 - 100
1,1'-Biphenyl	6670	4980		ug/Kg		75	50 - 100
Bis(2-chloroethoxy)methane	6670	4280		ug/Kg		64	49 - 100
Bis(2-chloroethyl)ether	6670	4860		ug/Kg		73	48 - 100
2,2'-oxybis[1-chloropropane]	6670	5820		ug/Kg		87	30 - 113
Bis(2-ethylhexyl) phthalate	6670	5380		ug/Kg		81	53 - 107
4-Bromophenyl phenyl ether	6670	5200		ug/Kg		78	52 - 101
Butyl benzyl phthalate	6670	5480		ug/Kg		82	52 - 107
Caprolactam	6670	5640		ug/Kg		85	48 - 111
Carbazole	6670	5060		ug/Kg		76	53 - 100
4-Chloroaniline	6870	5000		ug/Kg		75	47 - 100
4-Chloro-3-methylphenol	6670	5230		ug/Kg		79	49 - 106
2-Chloronaphthalene	6670	5200		ug/Kg		78	51 - 100
2-Chlorophenol	6670	5150		ug/Kg		77	51 - 100
4-Chlorophenyl phenyl ether	6670	5320		ug/Kg		80	52 - 100
Chrysene	6670	4760		ug/Kg		71	50 - 100
Dibenz(a,h)anthracene	6670	4860		ug/Kg		73	50 - 107
Dibenzofuran	6670	4990		ug/Kg		75	52 - 100
Di-n-butyl phthalate	6670	5230		ug/Kg		78	57 - 102
3,3'-Dichlorobenzidine	6670	6320		ug/Kg		95	43 - 100
2,4-Dichlorophenol	6670	5370		ug/Kg		81	53 - 101
Diethyl phthalate	6670	4910		ug/Kg		74	48 - 104
2,4-Dimethylphenol	6670	4800		ug/Kg		72	51 - 101
Dimethyl phthalate	6670	5090		ug/Kg		76	53 - 100
4,6-Dinitro-2-methylphenol	13300	12500		ug/Kg		93	51 - 100
2,4-Dinitrophenol	13300	12500		ug/Kg		94	33 - 101
2,4-Dinitrotoluene	6670	5710		ug/Kg		86	54 - 104
2,6-Dinitrotoluene	6670	5020		ug/Kg		75	51 - 106
Di-n-octyl phthalate	6670	5560		ug/Kg		83	41 - 108
Fluoranthene	6870	5090		ug/Kg		76	55 - 100
Fluorene	6670	5140		ug/Kg		77	52 - 100
Hexachlorobenzene	6670	4930		ug/Kg		74	49 - 100
Hexachlorobutadiene	6670	5260		ug/Kg		79	38 - 107
Hexachlorocyclopentadiene	6670	5590		ug/Kg		84	33 - 117
Hexachloroethane	6670	4970		ug/Kg		75	47 - 100
Indeno[1,2,3-cd]pyrene	6670	4920		ug/Kg		74	51 - 103
Isophorone	6670	4500		ug/Kg		67	48 - 105
2-Methylnaphthalene	6670	5070		ug/Kg		76	53 - 100

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-504492/2-A
Matrix: Solid
Analysis Batch: 504504

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 504492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylphenol	6670	5210		ug/Kg		78	50 - 101
Methylphenol, 3 & 4	6670	5440		ug/Kg		82	50 - 103
Naphthalene	6670	4890		ug/Kg		73	51 - 100
2-Nitroaniline	6670	5310		ug/Kg		80	42 - 123
3-Nitroaniline	6670	5520		ug/Kg		83	50 - 103
4-Nitroaniline	6670	5410		ug/Kg		61	52 - 103
Nitrobenzene	6670	4960		ug/Kg		74	44 - 108
2-Nitrophenol	6670	5600		ug/Kg		84	55 - 107
4-Nitrophenol	13300	9560		ug/Kg		72	30 - 134
N-Nitrosodiphenylamine	6670	5310		ug/Kg		80	52 - 100
N-Nitrosodi-n-propylamine	6670	5210		ug/Kg		78	45 - 107
Pentachlorophenol	13300	11700		ug/Kg		88	42 - 110
Phenanthrene	6670	5080		ug/Kg		76	53 - 100
Phenol	6670	5080		ug/Kg		78	49 - 100
Pyrene	6670	5260		ug/Kg		79	52 - 100
2,4,5-Trichlorophenol	6670	6100		ug/Kg		92	50 - 104
2,4,6-Trichlorophenol	6670	6170		ug/Kg		93	50 - 105

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*44 - 105*
2-Fluorophenol	*78*		*48 - 105*
2,4,6-Tribromophenol	*86*		*34 - 108*
Nitrobenzene-d5	*73*		*46 - 105*
Phenol-d5	*80*		*46 - 105*
Terphenyl-d14	*77*		*39 - 105*

Lab Sample ID: 180-197070-C-1-A MS
Matrix: Solid
Analysis Batch: 504504

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 504492

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]anthracene	ND		11700	7820		ug/Kg	☼	67	51 - 100
Benzo[b]fluoranthene	ND		11700	7910		ug/Kg	☼	68	48 - 100
Benzo[k]fluoranthene	ND		11700	8460		ug/Kg	☼	73	19 - 100
Benzo[a]pyrene	ND		11700	7640		ug/Kg	☼	66	51 - 100
Chrysene	ND		11700	7090		ug/Kg	☼	61	50 - 100
Dibenz(a,h)anthracene	ND		11700	6890		ug/Kg	☼	59	50 - 107
Indeno[1,2,3-cd]pyrene	ND		11700	7220		ug/Kg	☼	62	51 - 103
Naphthalene	ND		11700	7120		ug/Kg	☼	61	51 - 100

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*44 - 105*
Nitrobenzene-d5	*75*		*46 - 105*
Terphenyl-d14	*84*		*39 - 105*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-197070-C-1-B MSD
Matrix: Solid
Analysis Batch: 504504

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 504492

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]anthracene	ND		11800	8050		ug/Kg	☼	68	51 - 100	3	21
Benzo[b]fluoranthene	ND		11800	8660		ug/Kg	☼	73	48 - 100	9	20
Benzo[k]fluoranthene	ND		11800	8130		ug/Kg	☼	69	19 - 100	4	20
Benzo[a]pyrene	ND		11800	7970		ug/Kg	☼	67	51 - 100	4	20
Chrysene	ND		11800	7270		ug/Kg	☼	62	50 - 100	3	20
Dibenz(a,h)anthracene	ND		11800	6940		ug/Kg	☼	59	50 - 107	1	21
Indeno[1,2,3-cd]pyrene	ND		11800	7190		ug/Kg	☼	61	51 - 103	0	19
Naphthalene	ND		11800	7330		ug/Kg	☼	62	51 - 100	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*44 - 105*
Nitrobenzene-d5	*74*		*46 - 105*
Terphenyl-d14	*83*		*39 - 105*

Lab Sample ID: MB 180-504560/1-A
Matrix: Solid
Analysis Batch: 504588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 504560

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
Pyridine	ND		0.10		mg/L		10/14/25 22:31	10/15/25 09:19	1
2,4-Dinitrotoluene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
Hexachlorobenzene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
Hexachlorobutadiene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
Hexachloroethane	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
2-Methylphenol	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
Methylphenol, 3 & 4	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
Nitrobenzene	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
Pentachlorophenol	ND		0.25		mg/L		10/14/25 22:31	10/15/25 09:19	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		10/14/25 22:31	10/15/25 09:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*10 - 130*	*10/14/25 22:31*	*10/15/25 09:19*	*1*
2-Fluorophenol	*84*		*10 - 130*	*10/14/25 22:31*	*10/15/25 09:19*	*1*
2,4,6-Tribromophenol	*74*		*10 - 130*	*10/14/25 22:31*	*10/15/25 09:19*	*1*
Nitrobenzene-d5	*90*		*10 - 130*	*10/14/25 22:31*	*10/15/25 09:19*	*1*
Phenol-d5	*87*		*10 - 130*	*10/14/25 22:31*	*10/15/25 09:19*	*1*
Terphenyl-d14	*79*		*10 - 130*	*10/14/25 22:31*	*10/15/25 09:19*	*1*

Lab Sample ID: LCS 180-504560/2-A
Matrix: Solid
Analysis Batch: 504588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 504560

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	0.250	0.206		mg/L		82	10 - 130
Pyridine	0.250	0.222		mg/L		89	10 - 130
2,4-Dinitrotoluene	0.250	0.174		mg/L		70	10 - 130

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-504560/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504588 — **Prep Batch: 504560**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobenzene	0.250	0.161		mg/L		64	10 - 130
Hexachlorobutadiene	0.250	0.189		mg/L		76	10 - 130
Hexachloroethane	0.250	0.215		mg/L		86	10 - 130
2-Methylphenol	0.250	0.235		mg/L		94	10 - 130
Methylphenol, 3 & 4	0.500	0.468		mg/L		94	10 - 130
Nitrobenzene	0.250	0.247		mg/L		99	10 - 130
Pentachlorophenol	0.250	0.180	J	mg/L		72	10 - 130
2,4,5-Trichlorophenol	0.250	0.209		mg/L		83	10 - 130
2,4,6-Trichlorophenol	0.250	0.204		mg/L		81	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*10 - 130*
2-Fluorophenol	*86*		*10 - 130*
2,4,6-Tribromophenol	*75*		*10 - 130*
Nitrobenzene-d5	*91*		*10 - 130*
Phenol-d5	*90*		*10 - 130*
Terphenyl-d14	*81*		*10 - 130*

Lab Sample ID: LCSD 180-504560/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504588 — **Prep Batch: 504560**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.250	0.217		mg/L		87	10 - 130	5	15
Pyridine	0.250	0.233		mg/L		93	10 - 130	5	15
2,4-Dinitrotoluene	0.250	0.188		mg/L		75	10 - 130	8	15
Hexachlorobenzene	0.250	0.174		mg/L		70	10 - 130	8	15
Hexachlorobutadiene	0.250	0.198		mg/L		79	10 - 130	4	15
Hexachloroethane	0.250	0.225		mg/L		90	10 - 130	5	15
2-Methylphenol	0.250	0.241		mg/L		96	10 - 130	2	15
Methylphenol, 3 & 4	0.500	0.475		mg/L		95	10 - 130	1	15
Nitrobenzene	0.250	0.251		mg/L		101	10 - 130	2	15
Pentachlorophenol	0.250	0.190	J	mg/L		76	10 - 130	6	27
2,4,5-Trichlorophenol	0.250	0.228		mg/L		91	10 - 130	9	15
2,4,6-Trichlorophenol	0.250	0.219		mg/L		88	10 - 130	7	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*10 - 130*
2-Fluorophenol	*89*		*10 - 130*
2,4,6-Tribromophenol	*81*		*10 - 130*
Nitrobenzene-d5	*96*		*10 - 130*
Phenol-d5	*93*		*10 - 130*
Terphenyl-d14	*85*		*10 - 130*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LLCS 180-504444/2-C
Matrix: Solid
Analysis Batch: 504588

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 504560

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	0.250	0.222		mg/L		89	-
Pyridine	0.250	0.236		mg/L		94	-
2,4-Dinitrotoluene	0.250	0.189		mg/L		76	-
Hexachlorobenzene	0.250	0.180		mg/L		72	-
Hexachlorobutadiene	0.250	0.209		mg/L		84	-
Hexachloroethane	0.250	0.226		mg/L		91	-
2-Methylphenol	0.250	0.247		mg/L		99	-
Methylphenol, 3 & 4	0.500	0.488		mg/L		98	-
Nitrobenzene	0.250	0.263		mg/L		105	-
Pentachlorophenol	0.250	0.192	J	mg/L		77	-
2,4,5-Trichlorophenol	0.250	0.224		mg/L		90	-
2,4,6-Trichlorophenol	0.250	0.221		mg/L		88	-

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*10 - 130*
2-Fluorophenol	*92*		*10 - 130*
2,4,6-Tribromophenol	*82*		*10 - 130*
Nitrobenzene-d5	*98*		*10 - 130*
Phenol-d5	*95*		*10 - 130*
Terphenyl-d14	*88*		*10 - 130*

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-504561/1-A
Matrix: Solid
Analysis Batch: 504741

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 504561

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 13:57	1
Chlordane (technical)	ND		0.0050		mg/L		10/14/25 22:36	10/17/25 13:57	1
Endrin	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 13:57	1
Heptachlor	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 13:57	1
Heptachlor epoxide	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 13:57	1
Methoxychlor	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 13:57	1
Toxaphene	ND		0.040		mg/L		10/14/25 22:36	10/17/25 13:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*98*		*15 - 141*	*10/14/25 22:36*	*10/17/25 13:57*	*1*
Tetrachloro-m-xylene	*95*		*15 - 141*	*10/14/25 22:36*	*10/17/25 13:57*	*1*
DCB Decachlorobiphenyl (Surr)	*96*		*33 - 120*	*10/14/25 22:36*	*10/17/25 13:57*	*1*
DCB Decachlorobiphenyl (Surr)	*88*		*33 - 120*	*10/14/25 22:36*	*10/17/25 13:57*	*1*

Lab Sample ID: LCS 180-504561/2-A
Matrix: Solid
Analysis Batch: 504741

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 504561

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-BHC (Lindane)	0.0100	0.00960		mg/L		96	62 - 120

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-504561/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504741 — **Prep Batch: 504561**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Endrin	0.0100	0.0118		mg/L		118	62 - 138
Heptachlor	0.0100	0.0101		mg/L		101	53 - 119
Heptachlor epoxide	0.0100	0.00929		mg/L		93	63 - 125
Methoxychlor	0.0100	0.0114		mg/L		114	38 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*93*		*15 - 141*
Tetrachloro-m-xylene	*90*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*84*		*33 - 120*
DCB Decachlorobiphenyl (Surr)	*79*		*33 - 120*

Lab Sample ID: LCSD 180-504561/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504741 — **Prep Batch: 504561**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
gamma-BHC (Lindane)	0.0100	0.00990		mg/L		99	62 - 120	3	16
Endrin	0.0100	0.0118		mg/L		118	62 - 138	0	15
Heptachlor	0.0100	0.0104		mg/L		104	53 - 119	2	16
Heptachlor epoxide	0.0100	0.00968		mg/L		97	63 - 125	4	17
Methoxychlor	0.0100	0.0113		mg/L		113	38 - 137	1	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*94*		*15 - 141*
Tetrachloro-m-xylene	*89*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*81*		*33 - 120*
DCB Decachlorobiphenyl (Surr)	*81*		*33 - 120*

Lab Sample ID: MB 180-504628/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504797 — **Prep Batch: 504628**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
alpha-BHC	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
beta-BHC	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
delta-BHC	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
gamma-BHC (Lindane)	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
cis-Chlordane	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
trans-Chlordane	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
4,4'-DDD	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Chlordane (technical)	ND		17		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
4,4'-DDE	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
4,4'-DDT	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Dieldrin	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Endosulfan I	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Endosulfan II	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Endosulfan sulfate	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 180-504628/1-A
Matrix: Solid
Analysis Batch: 504797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 504628

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Endrin aldehyde	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Endrin ketone	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Heptachlor	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Heptachlor epoxide	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Methoxychlor	ND		1.7		ug/Kg		10/15/25 15:11	10/18/25 10:21	1
Toxaphene	ND		67		ug/Kg		10/15/25 15:11	10/18/25 10:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*79*		*53 - 124*	*10/15/25 15:11*	*10/18/25 10:21*	*1*
Tetrachloro-m-xylene	*76*		*53 - 124*	*10/15/25 15:11*	*10/18/25 10:21*	*1*
DCB Decachlorobiphenyl (Surr)	*68*		*36 - 142*	*10/15/25 15:11*	*10/18/25 10:21*	*1*
DCB Decachlorobiphenyl (Surr)	*65*		*36 - 142*	*10/15/25 15:11*	*10/18/25 10:21*	*1*

Lab Sample ID: LCS 180-504628/2-A
Matrix: Solid
Analysis Batch: 504797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 504628

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	33.3	25.5		ug/Kg		76	60 - 136
alpha-BHC	33.3	26.6		ug/Kg		80	62 - 138
beta-BHC	33.3	25.5		ug/Kg		77	60 - 130
delta-BHC	33.3	23.5		ug/Kg		71	41 - 136
gamma-BHC (Lindane)	33.3	27.2		ug/Kg		82	64 - 136
cis-Chlordane	33.3	25.4		ug/Kg		76	57 - 135
trans-Chlordane	33.3	26.0		ug/Kg		78	59 - 137
4,4'-DDD	33.3	29.0		ug/Kg		87	56 - 137
4,4'-DDE	33.3	29.4		ug/Kg		88	64 - 132
4,4'-DDT	33.3	35.4		ug/Kg		106	44 - 129
Dieldrin	33.3	30.4		ug/Kg		91	68 - 133
Endosulfan I	33.3	25.7		ug/Kg		77	53 - 148
Endosulfan II	33.3	28.3		ug/Kg		85	65 - 130
Endosulfan sulfate	33.3	29.2		ug/Kg		87	50 - 132
Endrin	33.3	30.9		ug/Kg		93	72 - 138
Endrin aldehyde	33.3	28.9		ug/Kg		87	47 - 139
Endrin ketone	33.3	28.0		ug/Kg		84	62 - 129
Heptachlor	33.3	27.7		ug/Kg		83	56 - 144
Heptachlor epoxide	33.3	29.4		ug/Kg		88	65 - 140
Methoxychlor	33.3	29.5		ug/Kg		88	37 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*77*		*53 - 124*
Tetrachloro-m-xylene	*73*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*69*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*67*		*36 - 142*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-197076-C-1-A MS
Matrix: Solid
Analysis Batch: 504797

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 504628

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	ND		39.6	25.1		ug/Kg	☼	63	60 - 136
alpha-BHC	ND		39.6	26.7		ug/Kg	☼	67	62 - 138
beta-BHC	ND		39.6	23.7		ug/Kg	☼	60	60 - 130
delta-BHC	ND		39.6	22.5		ug/Kg	☼	57	41 - 136
gamma-BHC (Lindane)	ND		39.6	26.9		ug/Kg	☼	68	64 - 138
cis-Chlordane	ND		39.6	25.3		ug/Kg	☼	64	57 - 135
trans-Chlordane	ND		39.6	25.1		ug/Kg	☼	63	59 - 137
4,4'-DDD	ND		39.6	28.4		ug/Kg	☼	72	56 - 137
4,4'-DDE	ND		39.6	28.5		ug/Kg	☼	72	64 - 132
4,4'-DDT	ND		39.6	30.6		ug/Kg	☼	77	44 - 129
Dieldrin	ND		39.6	28.6		ug/Kg	☼	72	68 - 133
Endosulfan I	ND		39.6	25.2		ug/Kg	☼	64	53 - 148
Endosulfan II	ND	FL	39.8	25.5	FL	ug/Kg	☼	64	65 - 130
Endosulfan sulfate	ND		39.6	24.3		ug/Kg	☼	61	50 - 132
Endrin	ND		39.6	30.5		ug/Kg	☼	77	72 - 138
Endrin aldehyde	ND		39.6	22.1		ug/Kg	☼	56	47 - 139
Endrin ketone	ND	FL	39.6	26.1		ug/Kg	☼	66	52 - 129
Heptachlor	ND		39.6	27.2		ug/Kg	☼	69	56 - 144
Heptachlor epoxide	ND		39.6	26.3		ug/Kg	☼	86	65 - 140
Methoxychlor	ND		39.6	28.6		ug/Kg	☼	72	37 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*68*		*53 - 124*
Tetrachloro-m-xylene	*63*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*58*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*57*		*36 - 142*

Lab Sample ID: 180-197076-C-1-B MSD
Matrix: Solid
Analysis Batch: 504797

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 504628

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	ND		38.6	28.5		ug/Kg	☼	74	60 - 136	13	21
alpha-BHC	ND		38.6	30.1		ug/Kg	☼	78	62 - 138	12	31
beta-BHC	ND		38.6	27.3		ug/Kg	☼	71	60 - 130	14	30
delta-BHC	ND		38.6	25.1		ug/Kg	☼	65	41 - 136	11	23
gamma-BHC (Lindane)	ND		38.6	30.6		ug/Kg	☼	79	64 - 138	13	30
cis-Chlordane	ND		38.6	28.5		ug/Kg	☼	74	57 - 135	12	22
trans-Chlordane	ND		38.6	28.4		ug/Kg	☼	74	59 - 137	12	22
4,4'-DDD	ND		38.8	30.3		ug/Kg	☼	78	56 - 137	6	22
4,4'-DDE	ND		38.6	30.8		ug/Kg	☼	80	64 - 132	8	16
4,4'-DDT	ND		38.6	32.5		ug/Kg	☼	84	44 - 129	6	37
Dieldrin	ND		38.6	31.3		ug/Kg	☼	81	68 - 133	9	18
Endosulfan I	ND		38.6	28.2		ug/Kg	☼	73	53 - 148	11	23
Endosulfan II	ND	FL	38.6	27.8		ug/Kg	☼	72	65 - 130	9	18
Endosulfan sulfate	ND		38.6	24.1		ug/Kg	☼	62	50 - 132	1	21
Endrin	ND		38.8	33.0		ug/Kg	☼	85	72 - 138	8	17
Endrin aldehyde	ND		38.6	22.1		ug/Kg	☼	57	47 - 139	0	19

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 180-197076-C-1-B MSD
Matrix: Solid
Analysis Batch: 504797

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 504628

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Endrin ketone	ND	FL	38.6	27.9		ug/Kg	☼	72	62 - 129	7	21
Heptachlor	ND		38.6	31.2		ug/Kg	☼	81	56 - 144	13	19
Heptachlor epoxide	ND		38.6	30.1		ug/Kg	☼	78	65 - 140	13	21
Methoxychlor	ND		38.6	30.3		ug/Kg	☼	78	37 - 140	6	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*78*		*53 - 124*
Tetrachloro-m-xylene	*70*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*62*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*60*		*36 - 142*

Lab Sample ID: LB2 180-504444/1-D
Matrix: Solid
Analysis Batch: 504741

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 504561

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:44	1
Chlordane (technical)	ND		0.0050		mg/L		10/14/25 22:38	10/17/25 15:44	1
Endrin	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:44	1
Heptachlor	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:44	1
Heptachlor epoxide	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:44	1
Methoxychlor	ND		0.00050		mg/L		10/14/25 22:36	10/17/25 15:44	1
Toxaphene	ND		0.040		mg/L		10/14/25 22:36	10/17/25 15:44	1

Surrogate	*LB2 %Recovery*	*LB2 Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*15 - 141*	*10/14/25 22:36*	*10/17/25 15:44*	*1*
Tetrachloro-m-xylene	*86*		*15 - 141*	*10/14/25 22:36*	*10/17/25 15:44*	*1*
DCB Decachlorobiphenyl (Surr)	*79*		*33 - 120*	*10/14/25 22:36*	*10/17/25 15:44*	*1*
DCB Decachlorobiphenyl (Surr)	*81*		*33 - 120*	*10/14/25 22:36*	*10/17/25 15:44*	*1*

Lab Sample ID: LLCS 180-504429/2-D
Matrix: Solid
Analysis Batch: 504741

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 504561

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-BHC (Lindane)	0.0100	0.00952		mg/L		95	-
Endrin	0.0100	0.0115		mg/L		115	-
Heptachlor	0.0100	0.0100		mg/L		100	-
Heptachlor epoxide	0.0100	0.00938		mg/L		94	-
Methoxychlor	0.0100	0.0109		mg/L		109	-

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*92*		*15 - 141*
Tetrachloro-m-xylene	*88*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*82*		*33 - 120*
DCB Decachlorobiphenyl (Surr)	*82*		*33 - 120*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LLCS 180-504444/2-D
Matrix: Solid
Analysis Batch: 504741

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 504561

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-BHC (Lindane)	0.0100	0.00942		mg/L		94	-
Endrin	0.0100	0.0115		mg/L		115	-
Heptachlor	0.0100	0.00982		mg/L		98	-
Heptachlor epoxide	0.0100	0.00920		mg/L		92	-
Methoxychlor	0.0100	0.0111		mg/L		111	-

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*15 - 141*
Tetrachloro-m-xylene	*89*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*82*		*33 - 120*
DCB Decachlorobiphenyl (Surr)	*81*		*33 - 120*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-504392/1-A
Matrix: Solid
Analysis Batch: 504500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 504392

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		80		ug/Kg		10/12/25 00:47	10/14/25 08:42	1
2,4,5-T	ND		20		ug/Kg		10/12/25 00:47	10/14/25 08:42	1
Silvex (2,4,5-TP)	ND		20		ug/Kg		10/12/25 00:47	10/14/25 08:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*52*		*13 - 111*	*10/12/25 00:47*	*10/14/25 08:42*	*1*
2,4-Dichlorophenylacetic acid	*59*		*13 - 111*	*10/12/25 00:47*	*10/14/25 08:42*	*1*

Lab Sample ID: LCS 180-504392/2-A
Matrix: Solid
Analysis Batch: 504500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 504392

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	400	321		ug/Kg		80	10 - 117
2,4,5-T	100	93.2		ug/Kg		93	11 - 129
Silvex (2,4,5-TP)	100	92.9		ug/Kg		93	10 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*80*		*13 - 111*
2,4-Dichlorophenylacetic acid	*88*		*13 - 111*

Lab Sample ID: LCSD 180-504392/3-A
Matrix: Solid
Analysis Batch: 504500

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 504392

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	400	320		ug/Kg		80	10 - 117	0	40
2,4,5-T	100	92.2		ug/Kg		92	11 - 129	1	40
Silvex (2,4,5-TP)	100	92.6		ug/Kg		93	10 - 125	0	37

Method: EPA 8151A - Herbicides (GC) (Continued)

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	80		13 - 111
2,4-Dichlorophenylacetic acid	87		13 - 111

Lab Sample ID: MB 180-504559/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504691 — **Prep Batch: 504559**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040		mg/L		10/14/25 22:28	10/16/25 13:17	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		10/14/25 22:28	10/16/25 13:17	20

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	75		13 - 111	10/14/25 22:28	10/16/25 13:17	20
2,4-Dichlorophenylacetic acid	79		13 - 111	10/14/25 22:28	10/16/25 13:17	20

Lab Sample ID: LCS 180-504559/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504663 — **Prep Batch: 504559**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	0.200	0.0685		mg/L		34	10 - 117
Silvex (2,4,5-TP)	0.0500	0.0324		mg/L		65	10 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4-Dichlorophenylacetic acid	60		13 - 111
2,4-Dichlorophenylacetic acid	64		13 - 111

Lab Sample ID: LCSD 180-504559/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504663 — **Prep Batch: 504559**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	0.200	0.0886		mg/L		44	10 - 117	28	40
Silvex (2,4,5-TP)	0.0500	0.0426		mg/L		85	10 - 125	27	37

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4-Dichlorophenylacetic acid	77		13 - 111
2,4-Dichlorophenylacetic acid	83		13 - 111

Lab Sample ID: LB2 180-504444/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 504663 — **Prep Batch: 504559**

Analyte	LB2 Result	LB2 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040		mg/L		10/14/25 22:28	10/16/25 10:41	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		10/14/25 22:28	10/16/25 10:41	20

Surrogate	LB2 %Recovery	LB2 Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	17		13 - 111	10/14/25 22:28	10/16/25 10:41	20
2,4-Dichlorophenylacetic acid	17		13 - 111	10/14/25 22:28	10/16/25 10:41	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Method: EPA 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LLCS 180-504429/2-B
Matrix: Solid
Analysis Batch: 504663

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 504559

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	0.200	0.116		mg/L		58	-
Silvex (2,4,5-TP)	0.0500	0.0405		mg/L		81	-

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*73*		*13 - 111*
2,4-Dichlorophenylacetic acid	*80*		*13 - 111*

Lab Sample ID: LLCS 180-504444/2-B
Matrix: Solid
Analysis Batch: 504663

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 504559

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	0.200	0.116		mg/L		58	-
Silvex (2,4,5-TP)	0.0500	0.0405		mg/L		81	-

Surrogate	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*79*		*13 - 111*

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-504507/43
Matrix: Solid
Analysis Batch: 504507

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			10/14/25 22:08	1
Nitrate as N	ND		0.10		mg/L			10/14/25 22:08	1

Lab Sample ID: LCS 180-504507/44
Matrix: Solid
Analysis Batch: 504507

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	49.3		mg/L		99	80 - 120
Nitrate as N	2.50	2.53		mg/L		101	80 - 120

Lab Sample ID: 180-197047-D-5 MS
Matrix: Solid
Analysis Batch: 504507

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	3.8		100	104		mg/L		100	80 - 120
Nitrate as N	ND		5.00	5.20		mg/L		104	80 - 120

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-197047-D-5 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504507

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	3.8		100	104		mg/L		100	80 - 120	0	15
Nitrate as N	ND		5.00	5.19		mg/L		104	80 - 120	0	15

Lab Sample ID: LB 180-504432/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504507

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			10/15/25 07:20	1
Nitrate as N	ND		0.10		mg/L			10/15/25 07:20	1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-716445/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 717005 — **Prep Batch: 716445**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		10/20/25 07:05	10/20/25 15:38	1

Lab Sample ID: LCS 410-716445/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 717005 — **Prep Batch: 716445**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	5.00	5.50		mg/L		110	83 - 119

Lab Sample ID: 180-197031-1 MS — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 717005 — **Prep Batch: 716445**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND		5.00	5.17		mg/L		100	75 - 125

Lab Sample ID: 180-197031-1 MSD — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 717005 — **Prep Batch: 716445**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	ND		5.00	5.24		mg/L		102	75 - 125	1	20

Lab Sample ID: 180-197031-1 DU — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 717005 — **Prep Batch: 716445**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	ND		ND		mg/L		NC	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-716445/1-A
Matrix: Solid
Analysis Batch: 716763

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 716445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.25		mg/L		10/20/25 07:05	10/20/25 12:16	1
Arsenic	ND		0.020		mg/L		10/20/25 07:05	10/20/25 12:16	1
Barium	ND		0.020		mg/L		10/20/25 07:05	10/20/25 12:16	1
Cadmium	ND		0.0050		mg/L		10/20/25 07:05	10/20/25 12:16	1
Chromium	ND		0.020		mg/L		10/20/25 07:05	10/20/25 12:16	1
Copper	ND		0.010		mg/L		10/20/25 07:05	10/20/25 12:16	1
Silver	ND		0.0050		mg/L		10/20/25 07:05	10/20/25 12:16	1
Molybdenum	ND		0.0050		mg/L		10/20/25 07:05	10/20/25 12:16	1
Nickel	ND		0.010		mg/L		10/20/25 07:05	10/20/25 12:16	1
Lead	ND		0.0050		mg/L		10/20/25 07:05	10/20/25 12:16	1
Antimony	ND		0.010		mg/L		10/20/25 07:05	10/20/25 12:16	1
Selenium	ND		0.010		mg/L		10/20/25 07:05	10/20/25 12:16	1
Zinc	ND		0.10		mg/L		10/20/25 07:05	10/20/25 12:16	1

Lab Sample ID: LCS 410-716445/2-A
Matrix: Solid
Analysis Batch: 716763

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 716445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	50.0	51.8		mg/L		104	83 - 114
Arsenic	5.00	5.10		mg/L		102	86 - 111
Barium	5.00	5.10		mg/L		102	86 - 114
Cadmium	0.500	0.493		mg/L		99	86 - 114
Chromium	5.00	4.88		mg/L		98	84 - 113
Copper	5.00	4.94		mg/L		99	86 - 111
Silver	0.500	0.481		mg/L		96	88 - 116
Molybdenum	0.500	0.497		mg/L		99	83 - 115
Nickel	5.00	4.88		mg/L		98	85 - 113
Lead	0.500	0.506		mg/L		101	86 - 114
Antimony	1.00	1.05		mg/L		105	85 - 115
Selenium	1.00	1.00		mg/L		100	86 - 111
Zinc	5.00	5.03		mg/L		101	86 - 112

Lab Sample ID: 180-197031-1 MS
Matrix: Solid
Analysis Batch: 716763

Client Sample ID: 251009013-08
Prep Type: TCLP
Prep Batch: 716445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	6.5		10.0	16.8		mg/L		103	75 - 125
Arsenic	ND		5.00	4.58		mg/L		91	75 - 125
Barium	0.38		100	91.4		mg/L		91	75 - 125
Cadmium	ND		1.00	0.880		mg/L		88	75 - 125
Chromium	ND		5.00	4.49		mg/L		90	75 - 125
Copper	0.20	B	5.00	4.76		mg/L		91	75 - 125
Silver	ND		5.00	4.41		mg/L		88	75 - 125
Molybdenum	0.11		10.0	8.89		mg/L		88	81 - 125
Nickel	0.14	^2	5.00	4.66		mg/L		91	75 - 125
Lead	ND		5.00	4.70		mg/L		94	75 - 125
Antimony	ND		5.00	4.50		mg/L		90	75 - 125

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-197031-1 MS — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 716763 — **Prep Batch: 716445**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	0.017		1.00	0.880		mg/L		86	75 - 125
Zinc	ND		5.00	4.44		mg/L		88	75 - 125

Lab Sample ID: 180-197031-1 MSD — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 716763 — **Prep Batch: 716445**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	6.5		10.0	15.2		mg/L		86	75 - 125	10	20
Arsenic	ND		5.00	4.26		mg/L		85	75 - 125	7	20
Barium	0.38		100	87.7		mg/L		87	75 - 125	4	20
Cadmium	ND		1.00	0.876		mg/L		88	75 - 125	1	20
Chromium	ND		5.00	4.19		mg/L		84	75 - 125	7	20
Copper	0.20	B	5.00	4.43		mg/L		85	75 - 125	7	20
Silver	ND		5.00	4.27		mg/L		85	75 - 125	3	20
Molybdenum	0.11		10.0	8.59		mg/L		85	81 - 125	3	20
Nickel	0.14	^2	5.00	4.45		mg/L		86	75 - 125	5	20
Lead	ND		5.00	4.49		mg/L		90	75 - 125	5	20
Antimony	ND		5.00	4.39		mg/L		88	75 - 125	2	20
Selenium	0.017		1.00	0.801		mg/L		78	75 - 125	9	20
Zinc	ND		5.00	4.32		mg/L		85	75 - 125	3	20

Lab Sample ID: 180-197031-1 DU — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 716763 — **Prep Batch: 716445**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Aluminum	6.5		6.29		mg/L		4	20
Arsenic	ND		ND		mg/L		NC	20
Barium	0.38		0.403		mg/L		7	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Copper	0.20	B	0.205	B	mg/L		3	20
Silver	ND		ND		mg/L		NC	20
Molybdenum	0.11		0.107		mg/L		0.3	20
Nickel	0.14	^2	0.143		mg/L		4	20
Lead	ND		ND		mg/L		NC	20
Antimony	ND		ND		mg/L		NC	20
Selenium	0.017		0.0122	F5	mg/L		35	20
Zinc	ND		ND		mg/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-716446/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 717006 — **Prep Batch: 716446**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		10/20/25 07:45	10/20/25 14:56	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 410-716446/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 717006 — **Prep Batch: 716446**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00100	0.00107		mg/L		107	80 - 120

Lab Sample ID: 180-197031-1 MS — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 717006 — **Prep Batch: 716446**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.0200	0.0195		mg/L		98	80 - 120

Lab Sample ID: 180-197031-1 MSD — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 717006 — **Prep Batch: 716446**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.0200	0.0203		mg/L		101	80 - 120	4	20

Lab Sample ID: 180-197031-1 DU — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 717006 — **Prep Batch: 716446**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/L		NC	20

Method: 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-717819/1 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 717819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Flashpoint	127	135		Degrees F		106	90 - 110

Lab Sample ID: LCSD 410-717819/2 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 717819

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	127	131		Degrees F		103	90 - 110	3	4

Method: 350.1_GD - Ammonia by Gas Diffusion

Lab Sample ID: MB 180-504642/17 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504642

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			10/15/25 14:03	1

Method: 350.1_GD - Ammonia by Gas Diffusion (Continued)

Lab Sample ID: LCS 180-504642/18 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	0.500	0.495		mg/L		99	90 - 110

Lab Sample ID: 180-197048-D-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504642

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	ND	FL	0.500	0.428	FL	mg/L		86	90 - 110

Lab Sample ID: 180-197048-D-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504642

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia, distilled	ND	FL	0.500	0.482		mg/L		96	90 - 110	12	20

Lab Sample ID: LB 180-504432/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504642

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			10/15/25 14:16	1

Method: 410.4 - COD

Lab Sample ID: LB 410-714243/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 717316

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75		mg/L			10/21/25 07:52	1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-717855/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 718798 — **Prep Batch: 717855**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		90		mg/Kg		10/22/25 07:17	10/23/25 00:23	1

Lab Sample ID: LCS 410-717855/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 718798 — **Prep Batch: 717855**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	45.6	J	mg/Kg		5	0 - 5.14

Method: 9012 - Cyanide, Reactive (Continued)

Lab Sample ID: 410-246245-E-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 718798 — **Prep Batch: 717855**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	ND		1030	ND		mg/Kg		0	0 - 44

Lab Sample ID: 410-246245-E-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 718798 — **Prep Batch: 717855**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Reactive	ND		1020	ND		mg/Kg		2	0 - 44	NC	11

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-717855/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 718066 — **Prep Batch: 717855**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160		mg/Kg		10/22/25 07:17	10/22/25 10:58	1

Lab Sample ID: LCS 410-717855/25-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 718066 — **Prep Batch: 717855**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	538	553		mg/Kg		103	54 - 104

Lab Sample ID: 410-246245-E-2-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 718066 — **Prep Batch: 717855**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	ND	FH	552	528		mg/Kg		96	62 - 104

Lab Sample ID: 410-246245-E-2-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 718066 — **Prep Batch: 717855**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide, Reactive	ND	FH	538	573	FH	mg/Kg		107	62 - 104	8	21

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-676179/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676223 — **Prep Batch: 676179**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		30		mg/Kg		10/15/25 12:55	10/15/25 17:10	1

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 240-676179/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676223 — **Prep Batch: 676179**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	72.9	66.3		mg/Kg		91	54 - 123

Lab Sample ID: 240-234918-I-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676223 — **Prep Batch: 676179**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	ND		89.9	62.1		mg/Kg	☼	49	10 - 128

Lab Sample ID: 240-234918-I-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 676223 — **Prep Batch: 676179**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND		89.5	86.3		mg/Kg	☼	76	10 - 128	33	40

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-504688/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504791 — **Prep Batch: 504688**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50		mg/Kg		10/16/25 11:53	10/17/25 15:28	1

Lab Sample ID: MB 180-504688/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504800 — **Prep Batch: 504688**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50		mg/Kg		10/16/25 11:53	10/18/25 12:02	1

Lab Sample ID: HLCS 180-504688/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504800 — **Prep Batch: 504688**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.261		mg/Kg		104	90 - 110

Lab Sample ID: LCS 180-504688/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504791 — **Prep Batch: 504688**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	26.0	24.9		mg/Kg		96	17 - 183

Method: EPA 9014 - Cyanide (Continued)

Lab Sample ID: LCS 180-504688/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504800 — **Prep Batch: 504688**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	26.0	24.8		mg/Kg		95	17 - 163

Lab Sample ID: LLCS 180-504688/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504791 — **Prep Batch: 504688**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0518		mg/Kg		104	90 - 110

Lab Sample ID: LLCS 180-504688/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504800 — **Prep Batch: 504688**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0483		mg/Kg		97	90 - 110

Lab Sample ID: 180-197166-C-13-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504791 — **Prep Batch: 504688**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND	^+	5.66	5.07	^+	mg/Kg	☼	90	75 - 125

Lab Sample ID: 180-197166-C-13-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504791 — **Prep Batch: 504688**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	^+	5.66	5.11	^+	mg/Kg	☼	90	75 - 125	1	20

Lab Sample ID: MB 180-504690/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504723 — **Prep Batch: 504690**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		10/16/25 12:32	10/16/25 16:32	1

Lab Sample ID: HLCS 180-504690/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504723 — **Prep Batch: 504690**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	250	251		ug/L		100	90 - 110

Lab Sample ID: LCS 180-504690/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504723 — **Prep Batch: 504690**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	205		ug/L		102	85 - 115

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Method: EPA 9014 - Cyanide

Lab Sample ID: LLCS 180-504690/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504723 — **Prep Batch: 504690**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	50.0	49.1		ug/L		98	90 - 110

Lab Sample ID: 180-196930-C-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504723 — **Prep Batch: 504690**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND		200	194		ug/L		97	75 - 125

Lab Sample ID: 180-196930-C-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504723 — **Prep Batch: 504690**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		200	199		ug/L		100	75 - 125	3	20

Lab Sample ID: 180-196930-C-1-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504723 — **Prep Batch: 504690**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	ND		ND		ug/L		NC	20

Lab Sample ID: LB 180-504432/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504723 — **Prep Batch: 504690**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		10/16/25 12:32	10/18/25 17:14	1

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-504544/1 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504544

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.0		SU		100	99 - 101

Lab Sample ID: LB 180-504432/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504544

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.9		0.1		SU			10/14/25 16:20	1
Temperature	25.1		0.1		Degrees C			10/14/25 16:20	1

Method: EPA 9040C - pH (Continued)

Lab Sample ID: 180-196984-B-1-C DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504544

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.2		7.2		SU		0	2
Temperature	25.1		25.0		Degrees C		0.4	5

Method: EPA 9095B - Paint Filter

Lab Sample ID: 180-196984-B-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504547

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Free Liquid	CNF		CNF		NONE		NC	20

Method: SM 2540B - Total Solids

Lab Sample ID: MB 180-504643/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504643

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			10/15/25 17:50	1

Lab Sample ID: LCS 180-504643/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Solids	252	218		mg/L		87	85 - 115

Lab Sample ID: LB 180-504432/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504643

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			10/15/25 17:50	1

Lab Sample ID: 180-196984-B-1-C DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504643

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	580		576		mg/L		0	10

Method: SM 2540E - Solids, Volatile and Fixed (VS)

Lab Sample ID: MB 180-504644/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504644

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			10/15/25 17:50	1

Method: SM 2540E - Solids, Volatile and Fixed (VS) (Continued)

Lab Sample ID: LB 180-504432/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504644

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			10/15/25 17:50	1

Lab Sample ID: 180-196984-B-1-C DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 504644

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Volatile Solids	260		348	F3	mg/L		27	10

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-197031-1 DU — **Client Sample ID: 251009013-08**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504468

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	33		34.1		%		3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

GC/MS VOA

Leach Batch: 717312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	1311	
180-197197-A-1-C MS	Matrix Spike	TCLP	Solid	1311	
180-197197-A-1-C MSD	Matrix Spike Duplicate	TCLP	Solid	1311	

Analysis Batch: 718670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	8260D	717312
MB 410-718670/7	Method Blank	Total/NA	Solid	8260D	
LCS 410-718670/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-718670/5	Lab Control Sample Dup	Total/NA	Solid	8260D	
180-197197-A-1-C MS	Matrix Spike	TCLP	Solid	8260D	717312
180-197197-A-1-C MSD	Matrix Spike Duplicate	TCLP	Solid	8260D	717312

GC/MS Semi VOA

Leach Batch: 504444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	EPA 1311	
LLCS 180-504444/2-C	Lab Control Sample	TCLP	Solid	EPA 1311	

Prep Batch: 504492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	3541	
MB 180-504492/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-504492/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-197070-C-1-A MS	Matrix Spike	Total/NA	Solid	3541	
180-197070-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 504504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	EPA 8270E	504492
MB 180-504492/1-A	Method Blank	Total/NA	Solid	EPA 8270E	504492
LCS 180-504492/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	504492
180-197070-C-1-A MS	Matrix Spike	Total/NA	Solid	EPA 8270E	504492
180-197070-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8270E	504492

Prep Batch: 504560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	3510C	504444
MB 180-504560/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-504560/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-504560/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
LLCS 180-504444/2-C	Lab Control Sample	TCLP	Solid	3510C	504444

Analysis Batch: 504588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	EPA 8270E	504560
MB 180-504560/1-A	Method Blank	Total/NA	Solid	EPA 8270E	504580
LCS 180-504560/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	504560
LCSD 180-504560/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	504560
LLCS 180-504444/2-C	Lab Control Sample	TCLP	Solid	EPA 8270E	504560

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

GC Semi VOA

Prep Batch: 504392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	8151A	
MB 180-504392/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-504392/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-504392/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Leach Batch: 504429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 180-504429/2-B	Lab Control Sample	TCLP	Solid	EPA 1311	
LLCS 180-504429/2-D	Lab Control Sample	TCLP	Solid	EPA 1311	

Leach Batch: 504444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	EPA 1311	
LB2 180-504444/1-B	Method Blank	TCLP	Solid	EPA 1311	
LB2 180-504444/1-D	Method Blank	TCLP	Solid	EPA 1311	
LLCS 180-504444/2-B	Lab Control Sample	TCLP	Solid	EPA 1311	
LLCS 180-504444/2-D	Lab Control Sample	TCLP	Solid	EPA 1311	

Analysis Batch: 504500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	EPA 8151A	504392
MB 180-504392/1-A	Method Blank	Total/NA	Solid	EPA 8151A	504392
LCS 180-504392/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	504392
LCSD 180-504392/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	504392

Prep Batch: 504559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	8151A	504444
LB2 180-504444/1-B	Method Blank	TCLP	Solid	8151A	504444
MB 180-504559/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-504559/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-504559/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	
LLCS 180-504429/2-B	Lab Control Sample	TCLP	Solid	8151A	504429
LLCS 180-504444/2-B	Lab Control Sample	TCLP	Solid	8151A	504444

Prep Batch: 504561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	3510C	504444
LB2 180-504444/1-D	Method Blank	TCLP	Solid	3510C	504444
MB 180-504561/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-504561/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-504561/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	
LLCS 180-504429/2-D	Lab Control Sample	TCLP	Solid	3510C	504429
LLCS 180-504444/2-D	Lab Control Sample	TCLP	Solid	3510C	504444

Prep Batch: 504628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	3541	
MB 180-504628/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-504628/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-197076-C-1-A MS	Matrix Spike	Total/NA	Solid	3541	

GC Semi VOA (Continued)

Prep Batch: 504628 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197076-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 504663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	EPA 8151A	504559
LB2 180-504444/1-B	Method Blank	TCLP	Solid	EPA 8151A	504559
LCS 180-504559/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	504559
LCSD 180-504559/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	504559
LLCS 180-504429/2-B	Lab Control Sample	TCLP	Solid	EPA 8151A	504559
LLCS 180-504444/2-B	Leb Control Sample	TCLP	Solid	EPA 8151A	504559

Analysis Batch: 504691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-504559/1-A	Method Blank	Total/NA	Solid	EPA 8151A	504559

Analysis Batch: 504741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	EPA 8081B	504561
LB2 180-504444/1-D	Method Blank	TCLP	Solid	EPA 8081B	504561
MB 180-504561/1-A	Method Blank	Total/NA	Solid	EPA 8081B	504561
LCS 180-504561/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	504561
LCSD 180-504561/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	504561
LLCS 180-504429/2-D	Lab Control Sample	TCLP	Solid	EPA 8081B	504561
LLCS 180-504444/2-D	Lab Control Sample	TCLP	Solid	EPA 8081B	504561

Analysis Batch: 504797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	EPA 8081B	504628
MB 180-504628/1-A	Method Blank	Total/NA	Solid	EPA 8081B	504628
LCS 180-504628/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	504628
180-197076-C-1-A MS	Matrix Spike	Total/NA	Solid	EPA 8081B	504628
180-197076-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8081B	504628

HPLC/IC

Leach Batch: 504432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	D3987-85	
LB 180-504432/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 504507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	EPA 9056A	504432
LB 180-504432/1-A	Method Blank	ASTM Leach	Solid	EPA 9056A	504432
MB 180-504507/43	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-504507/44	Lab Control Sample	Total/NA	Solid	EPA 9056A	
180-197047-D-5 MS	Matrix Spike	Total/NA	Solid	EPA 9056A	
180-197047-D-5 MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9056A	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

Metals

Leach Batch: 714865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	1311	
180-197031-1 MS	251009013-08	TCLP	Solid	1311	
180-197031-1 MSD	251009013-08	TCLP	Solid	1311	
180-197031-1 DU	251009013-08	TCLP	Solid	1311	

Prep Batch: 716445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	3005A	714865
MB 410-716445/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 410-716445/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
180-197031-1 MS	251009013-08	TCLP	Solid	3005A	714865
180-197031-1 MSD	251009013-08	TCLP	Solid	3005A	714865
180-197031-1 DU	251009013-08	TCLP	Solid	3005A	714865

Prep Batch: 716446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	7470A	714865
MB 410-716446/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 410-716446/2-A	Lab Control Sample	Total/NA	Solid	7470A	
180-197031-1 MS	251009013-08	TCLP	Solid	7470A	714865
180-197031-1 MSD	251009013-08	TCLP	Solid	7470A	714865
180-197031-1 DU	251009013-08	TCLP	Solid	7470A	714865

Analysis Batch: 716763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	6020B	716445
MB 410-716445/1-A	Method Blank	Total Recoverable	Solid	6020B	716445
LCS 410-716445/2-A	Lab Control Sample	Total Recoverable	Solid	6020B	716445
180-197031-1 MS	251009013-08	TCLP	Solid	6020B	716445
180-197031-1 MSD	251009013-08	TCLP	Solid	6020B	716445
180-197031-1 DU	251009013-08	TCLP	Solid	6020B	716445

Analysis Batch: 717005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	6010D	716445
MB 410-716445/1-A	Method Blank	Total Recoverable	Solid	6010D	716445
LCS 410-716445/2-A	Lab Control Sample	Total Recoverable	Solid	6010D	716445
180-197031-1 MS	251009013-08	TCLP	Solid	6010D	716445
180-197031-1 MSD	251009013-08	TCLP	Solid	6010D	716445
180-197031-1 DU	251009013-08	TCLP	Solid	6010D	716445

Analysis Batch: 717006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	TCLP	Solid	7470A	716446
MB 410-716446/1-A	Method Blank	Total/NA	Solid	7470A	716446
LCS 410-716446/2-A	Lab Control Sample	Total/NA	Solid	7470A	716446
180-197031-1 MS	251009013-08	TCLP	Solid	7470A	716446
180-197031-1 MSD	251009013-08	TCLP	Solid	7470A	716446
180-197031-1 DU	261009013-08	TCLP	Solid	7470A	716446

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

General Chemistry

Leach Batch: 504432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	D3987-85	
LB 180-504432/1-A	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-504432/1-B	Method Blank	ASTM Leach	Solid	D3987-85	
180-196984-B-1-C DU	Duplicate	ASTM Leach	Solid	D3987-85	

Analysis Batch: 504468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	SM 2540G	
180-197031-1 DU	251009013-08	Total/NA	Solid	SM 2540G	

Analysis Batch: 504544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	EPA 9040C	504432
LB 180-504432/1-A	Method Blank	ASTM Leach	Solid	EPA 9040C	504432
LCS 180-504544/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	
180-196984-B-1-C DU	Duplicate	ASTM Leach	Solid	EPA 9040C	504432

Analysis Batch: 504547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	EPA 9095B	
180-196984-B-1 DU	Duplicate	Total/NA	Solid	EPA 9095B	

Analysis Batch: 504642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	350.1_GD	504432
LB 180-504432/1-A	Method Blank	ASTM Leach	Solid	350.1_GD	504432
MB 180-504642/17	Method Blank	Total/NA	Solid	350.1_GD	
LCS 180-504642/18	Lab Control Sample	Total/NA	Solid	350.1_GD	
180-197048-D-2 MS	Matrix Spike	Total/NA	Solid	350.1_GD	
180-197048-D-2 MSD	Matrix Spike Duplicate	Total/NA	Solid	350.1_GD	

Analysis Batch: 504643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	SM 2540B	504432
LB 180-504432/1-A	Method Blank	ASTM Leach	Solid	SM 2540B	504432
MB 180-504643/1	Method Blank	Total/NA	Solid	SM 2540B	
LCS 180-504643/2	Lab Control Sample	Total/NA	Solid	SM 2540B	
180-196984-B-1-C DU	Duplicate	ASTM Leach	Solid	SM 2540B	504432

Analysis Batch: 504644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	SM 2540E	504432
LB 180-504432/1-A	Method Blank	ASTM Leach	Solid	SM 2540E	504432
MB 180-504644/1	Method Blank	Total/NA	Solid	SM 2540E	
180-196984-B-1-C DU	Duplicate	ASTM Leach	Solid	SM 2540E	504432

Prep Batch: 504688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	9010C	
MB 180-504688/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-504688/2-A	Lab Control Sample	Total/NA	Solid	9010C	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197031-1
SDG: 251009013

General Chemistry (Continued)

Prep Batch: 504688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-504688/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-504688/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-197166-C-13-B MS	Matrix Spike	Total/NA	Solid	9010C	
180-197166-C-13-C MSD	Matrix Spike Duplicate	Total/NA	Solid	9010C	

Prep Batch: 504690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	9010C	504432
LB 180-504432/1-B	Method Blank	ASTM Leach	Solid	9010C	504432
MB 180-504690/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-504690/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-504690/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-504690/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-196930-C-1-C MS	Matrix Spike	Total/NA	Solid	9010C	
180-196930-C-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	9010C	
180-196930-C-1-B DU	Duplicate	Total/NA	Solid	9010C	

Analysis Batch: 504723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	EPA 9014	504690
LB 180-504432/1-B	Method Blank	ASTM Leach	Solid	EPA 9014	504690
MB 180-504690/4-A	Method Blank	Total/NA	Solid	EPA 9014	504690
HLCS 180-504690/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	504690
LCS 180-504690/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	504690
LLCS 180-504690/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	504690
180-196930-C-1-C MS	Matrix Spike	Total/NA	Solid	EPA 9014	504690
180-196930-C-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9014	504690
180-196930-C-1-B DU	Duplicate	Total/NA	Solid	EPA 9014	504690

Analysis Batch: 504791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-504688/4-A	Method Blank	Total/NA	Solid	EPA 9014	504688
LCS 180-504688/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	504688
LLCS 180-504688/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	504688
180-197166-C-13-B MS	Matrix Spike	Total/NA	Solid	EPA 9014	504688
180-197166-C-13-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9014	504688

Analysis Batch: 504800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	EPA 9014	504688
MB 180-504688/4-A	Method Blank	Total/NA	Solid	EPA 9014	504688
HLCS 180-504688/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	504688
LCS 180-504688/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	504688
LLCS 180-504688/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	504688

Prep Batch: 676179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	9030B	
MB 240-676179/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 240-676179/2-A	Lab Control Sample	Total/NA	Solid	9030B	
240-234918-I-1-E MS	Matrix Spike	Total/NA	Solid	9030B	

General Chemistry (Continued)

Prep Batch: 676179 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234918-I-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	9030B	

Analysis Batch: 676223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	9034	676179
MB 240-676179/1-A	Method Blank	Total/NA	Solid	9034	676179
LCS 240-676179/2-A	Lab Control Sample	Total/NA	Solid	9034	676179
240-234918-I-1-E MS	Matrix Spike	Total/NA	Solid	9034	676179
240-234918-I-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	9034	676179

Leach Batch: 714243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	D3987-85	
LB 410-714243/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 717316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	ASTM Leach	Solid	410.4	714243
LB 410-714243/1-A	Method Blank	ASTM Leach	Solid	410.4	714243

Analysis Batch: 717819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	1010B	
LCS 410-717819/1	Lab Control Sample	Total/NA	Solid	1010B	
LCSD 410-717819/2	Lab Control Sample Dup	Total/NA	Solid	1010B	

Prep Batch: 717855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	7.3.4	
MB 410-717855/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-717855/25-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-717855/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
410-246245-E-2-B MS	Matrix Spike	Total/NA	Solid	7.3.4	
410-246245-E-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.4	
410-246245-E-2-D MS	Matrix Spike	Total/NA	Solid	7.3.4	
410-246245-E-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.4	

Analysis Batch: 718066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	9034	717855
MB 410-717855/1-A	Method Blank	Total/NA	Solid	9034	717855
LCS 410-717855/25-A	Lab Control Sample	Total/NA	Solid	9034	717855
410-246245-E-2-D MS	Matrix Spike	Total/NA	Solid	9034	717855
410-246245-E-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	9034	717855

Analysis Batch: 718798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197031-1	251009013-08	Total/NA	Solid	9012	717855
MB 410-717855/1-A	Method Blank	Total/NA	Solid	9012	717855
LCS 410-717855/2-A	Lab Control Sample	Total/NA	Solid	9012	717855
410-246245-E-2-B MS	Matrix Spike	Total/NA	Solid	9012	717855

General Chemistry (Continued)

Analysis Batch: 718798 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-246245-E-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	9012	717855

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251009013**

Additional Information : Quarterly Limed Sludge

Sample composited on Oct 9 from grabs collected on Oct 1, Oct 2, Oct 5, Oct 6, Oct 7, Oct 8, Oct 9

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: See attached Parameter List	See attached Parameter List	See attached Parameter List	Total sulfide		
							Number of Containers					
251009013-08	10/9/25	0957	S	N	C	Always maintain sample/extract at	2	4	3	1		
						25°C when reading any pH result.						
						Solids must be analyzed by 2540G.						
						All methods must be accredited by						
						PADEP or NELAC.						
						Email a copy of LIMS login with signed						
						COC as soon as possible after receipt.						
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-197031 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	10/10/25	0950	[signature]	Eurofins Pgh	10-10-25	0950
[signature]	EPITIME	10-10-25	1250				

COC Analyst Cooler Review: Initials: JH Date: 10/10/25

Supervisor Review: Initials: [illegible] Date: 10-9-25

Contract Lab portion of Quarterly Analysis when shared with ALCOSAN Lab- PLUS metals

SAMPLE TYPE	FREQUENCY	PARAMETERS			SAMPLED BY
ASH, GRIT, SCUM & LIMED SLUDGE- QUARTERLY					
COMPOSITE (2 Clear Quarts + 4 Amber half pints + 2 pints)					
7 days of a Grab sample to generate a Composite* (minimum 6 grabs) Each sample matrix is analyzed for all parameters listed. ---------- NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlined sludge is included, analyses are performed by contract laboratory(s) only- **see Residuals for which quarter.** **Check reporting limit requirments.**	Quarterly	ASTM EXTRACTION (LIQUID)			Laboratory
		pH(SW-846 9040C)	Nitrate-Nitrogen	NH3 N	
		pH Temp(SW 846 9040C)	Cyanide Total	Total Sulfates	
		Total Solids	COD		
		Total Volatile Solids			
		TCLP EXTRACTION (LIQUID)			
		TCLP METALS	Antimony	Herbicides	
		Aluminum	Boron		
		Arsenic	Copper	Pesticides	
		Barium	Molybdenum	Chlordane	
		Cadmium	Nickel	Toxaphene	
		Chromium	Zinc	8270 BNA	
		Lead	Silver	8260 Volatile Organics (ZHE)	
		Mercury			
		Selenium			
		MISCELLANEOUS (SOLID)			
		Herbicides			
		Pesticides			
		Heptachlor/Hep Epoxide			
		Chlordane			
		Toxaphene			
		Cyanide Total			
		Total Sulfide			
		Paint Filter Test			
		Ignitability			
		8270 BNA			
		Solids, Total (SM2540G)			
		COMPOSITE (Half Pint) Lancaster Lab			
		Reactive Cyanide			
		Reactive Sulfide			

Red indicates analyses performed by a contract laboratory

SEND 2 FULL CLEAR QUARTS + 4 AMBER 1/2 PINTS + 2 PINTS + ONE HALF PINT OF COMPOSITE

Login ASTM as test group "ASTM Extraction (liquid)"

Alcosan #25 ±0.1

J1	0.8	0.9
J2	0.9	1.0

180-197031 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-546824.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP Pennsylvania		Job #: 180-197031-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 10/23/2025			Preservation Codes:
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH, 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030BSulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
251009013-08 (180-197031 1)	10/9/25	09:57 Eastern	G	Solid			X	1	

(KM) ~~GO~~ E172

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: James J. Kinkelman	Date/Time: 10/13/25 17:00	Company: EPITINE	Received by: KMartin	Date/Time: 10/14/25 940	Company: EUR
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.		Cooler Temperature(s) °C and Other Remarks:		

Ver 10/10/2024 10/24/2025

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Eur. Pittsburgh Site Name _____ Cooler unpacked by: KMartin
Cooler Received on 10/14/25 Opened on 10/14/25
FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other
Receipt After-hours Drop-off Date/Time Storage Location

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____
Packing material used Bubble Wrap Foam Plastic Bag None Other _____
COOLANT Wet Ice Blue Ice Dry Ice Water None

I Cooler temperature upon receipt ☐ See Multiple Cooler Form
IR GUN # 17 (CF +0.7 °C) Observed Cooler Temp 4.9 °C Corrected Cooler Temp 5.6 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes ~~No~~ NA
-Were tamper/custody seals intact and uncompromised? Yes No NA
3 Shippers' packing slip attached to the cooler(s)? Yes No
4 Did custody papers accompany the sample(s)? Yes No
5 Were the custody papers relinquished & signed in the appropriate place? Yes No
6 Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7 Did all bottles arrive in good condition (Unbroken)? Yes No
8 Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
9 For each sample, does the COC specify preservatives (Y/N) # of containers (Y/N), and sample type of grab/comp (Y/N)?
10 Were correct bottle(s) used for the test(s) indicated? Yes No
11 Sufficient quantity received to perform indicated analyses? Yes No
12 Are these work share samples and all listed on the COC? Yes No
If yes, Questions 13-17 have been checked at the originating laboratory
13 Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC567196
14 Were VOAs on the COC? Yes No
15 Were air bubbles >6 mm in any VOA vials? ● ← Larger than this. Yes No NA
16 Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17 Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page
Labeled by:
Labels Verified by:

19 SAMPLE CONDITION
Sample(s) _____ were received after the recommended holding time had expired
Sample(s) _____ were received in a broken container
Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION
Sample(s) _____ were further preserved in the laboratory
Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

TRK# 0201 4642 5783 0505

TUE - 14 OCT 10:30A
PRIORITY OVERNIGHT

64 CAKA

44203
40H-US CLE

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information - (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-546785.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-197031-1
Address: 2425 New Holland Pike,	Due Date Requested: 10/23/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	410.4/ASTM_LEACH_NP	8260D/1311_ZTCLP Volatiles + Naphthalene	6020B/1311T_M(MOD) TCLP Quarterly Metals List	7470A/1311T_HgMercury	8010D/1311T_M(MOD) TCLP Boron	9012_ReactiveCN/7.3.3	9034_Reactive/7.3.4	1010Bignitability, Pensky-Martens Closed-Cup						Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X														X	
251009013-08 (180-197031-1)	10/9/25	09:57 Eastern	G	Solid			X	X	X	X	X	X	X	X						5	, DO NOT Overdilute; low limits required

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: James J. Kinkelman	Date/Time: 10/13/25 13:00	Company: EPHNE	Received by: MCA	Date/Time: 10/13/25 1400	Company: EIIE
Relinquished by: MCA	Date/Time: 10.13.25 1845	Company: EIIE	Received by: [signature]	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by: [signature]	Date/Time: 10/13/25 1845	Company: EIIE
Custody Seals Intact: ☑ Yes △ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: R7.8 C2.7		

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-197031-1
SDG Number: 251009013

Login Number: 197031
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-197031-1
SDG Number: 251009013

Login Number: 197031
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/13/25 07:30 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251009014 **Sample Date:** 10/9/2025

Sample ID Number: 251009014-08 **Sample Type:** COMPOSITE

Customer Sample Number: comp metals

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
Thallium	Contract Lab	EurofinsLancaster	10/16/2025	<0.26	mg/kg dry	0.26		
Total Sulfur	Contract Lab	EurofinsLancaster	10/15/2025	9100	mg/kg dry	130		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	10/13/2025	34	%	0.50		
Metals								
Antimony	Contract Lab	EurofinsLancaster	10/16/2025	1.7	mg/kg dry	0.52		
Arsenic	Contract Lab	EurofinsLancaster	10/16/2025	5.8	mg/kg dry	1.0		
Barium	Contract Lab	EurofinsLancaster	10/16/2025	370	mg/kg dry	1.0		
Beryllium	Contract Lab	EurofinsLancaster	10/16/2025	0.44	mg/kg dry	0.26		
Boron	Contract Lab	EurofinsLancaster	10/15/2025	<52	mg/kg dry	52		
Cadmium	Contract Lab	EurofinsLancaster	10/16/2025	0.80	mg/kg dry	0.26		
Chromium	Contract Lab	EurofinsLancaster	10/16/2025	37	mg/kg dry	1.0		
Copper	Contract Lab	EurofinsLancaster	10/16/2025	250	mg/kg dry	1.0		
Lead	Contract Lab	EurofinsLancaster	10/16/2025	39	mg/kg dry	0.52		
Mercury, Total	Contract Lab	EurofinsLancaster	10/14/2025	0.41	mg/kg dry	0.17		
Molybdenum	Contract Lab	EurofinsLancaster	10/16/2025	9.9	mg/kg dry	0.52		

Printed Date
Thursday, November 6, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251009014

Sample Date: 10/9/2025

Sample ID Number: 251009014-08

Sample Type: COMPOSITE

Customer Sample Number: comp metals

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Nickel	Contract Lab	EurofinsLancaster	10/16/2025	24	mg/kg dry	1.0		
Selenium	Contract Lab	EurofinsLancaster	10/16/2025	3.5	mg/kg dry	1.0		
Silver	Contract Lab	EurofinsLancaster	10/16/2025	1.7	mg/kg dry	0.26		
Sodium	Contract Lab	EurofinsLancaster	10/16/2025	400	mg/kg dry	130		
Zinc	Contract Lab	EurofinsLancaster	10/16/2025	550	mg/kg dry	77		

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on October 9 from grabs collected oct 1,oct 2, oct 5, oct 6, oct 7, oct 8, oct 9

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Alissa Hoover

11-6-25

Date

Printed Date
Thursday, November 6, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 10/17/2025 4:18:00 AM

JOB DESCRIPTION

Quarterly Limed Sludge
251009014

JOB NUMBER

180-197030-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

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PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
10/17/2025 4:18:00 AM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 15
Chain of Custody 16
Receipt Checklists 20

Job ID: 180-197030-1 — Eurofins Pittsburgh

Job Narrative
180-197030-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 10/10/2025 12:50 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 1.0°C.

Receipt Exceptions
The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): 251009014-08 (180-197030-1). The container labels list the sample ID as 251009014-01 while the chain has 251009014-08. Logged per the chain.

The Field Sampler was not listed on the Chain of Custody.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Qualifiers

Metals

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-197030-1	251009014-08	Solid	10/09/25 09:57	10/10/25 12:50	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7471B	Mercury (CVAA)	SW846	ELLE
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
7471B	Preparation, Mercury	SW846	ELLE

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Client Sample ID: 251009014-08 **Lab Sample ID: 180-197030-1**
Date Collected: 10/09/25 09:57 **Matrix: Solid**
Date Received: 10/10/25 12:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			504468	10/13/25 17:36	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251009014-08 **Lab Sample ID: 180-197030-1**
Date Collected: 10/09/25 09:57 **Matrix: Solid**
Date Received: 10/10/25 12:50 **Percent Solids: 34.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.14 g	100 mL	714026	10/14/25 22:00	UAMX	ELLE
Total/NA	Analysis	6010D		1			714428	10/15/25 09:29	MT26	ELLE
	Instrument ID: T74 - 23745									
Total/NA	Prep	3050B			1.14 g	100 mL	714026	10/14/25 22:00	UAMX	ELLE
Total/NA	Analysis	6020B		2			715468	10/16/25 20:13	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	7471B			0.61 g	100 mL	713129	10/14/25 14:30	HNC4	ELLE
Total/NA	Analysis	7471B		1			714022	10/14/25 20:08	IJ3I	ELLE
	Instrument ID: M17									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Analysis
  - ELS = Edwin Shireman

Lab: ELLE
- Batch Type: Prep
  - HNC4 = Mindy Schantzenbach
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - IJ3I = Elizabeth Brittingham
  - LHF4 = Diamond Boyer
  - MT26 = Jason Knight

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Client Sample ID: 251009014-08
Date Collected: 10/09/25 09:57
Date Received: 10/10/25 12:50

Lab Sample ID: 180-197030-1
Matrix: Solid
Percent Solids: 34.0

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		52		mg/Kg	☼	10/14/25 22:00	10/15/25 09:29	1
Sulfur	**9100**		130		mg/Kg	☼	10/14/25 22:00	10/15/25 09:29	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.7**		0.52		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Arsenic	**5.8**		1.0		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Barium	**370**		1.0		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Beryllium	**0.44**		0.26		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Cadmium	**0.80**		0.26		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Chromium	**37**		1.0		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Copper	**250**		1.0		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Lead	**39**		0.52		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Molybdenum	**9.9**		0.52		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Nickel	**24**		1.0		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Selenium	**3.5**		1.0		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Silver	**1.7**		0.26		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Sodium	**400**		130		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Thallium	ND		0.26		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2
Zinc	**550**		77		mg/Kg	☼	10/14/25 22:00	10/16/25 20:13	2

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.41**		0.17		mg/Kg	☼	10/14/25 14:30	10/14/25 20:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**34**		0.50		%			10/13/25 17:36	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-714026/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 714428 — **Prep Batch: 714026**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		20		mg/Kg		10/14/25 22:00	10/15/25 09:11	1
Sulfur	ND		50		mg/Kg		10/14/25 22:00	10/15/25 09:11	1

Lab Sample ID: LCS 410-714026/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 714428 — **Prep Batch: 714026**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	50.0	48.8		mg/Kg		98	80 - 120
Sulfur	500	469		mg/Kg		94	89 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-714026/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 715468 — **Prep Batch: 714026**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Arsenic	ND		0.40		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Barium	ND		0.40		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Beryllium	ND		0.10		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Cadmium	ND		0.10		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Chromium	ND		0.40		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Copper	ND		0.40		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Lead	ND		0.20		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Molybdenum	ND		0.20		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Nickel	ND		0.40		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Selenium	ND		0.40		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Silver	ND		0.10		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Sodium	ND		50		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Thallium	ND		0.10		mg/Kg		10/14/25 22:00	10/16/25 19:42	2
Zinc	ND		30		mg/Kg		10/14/25 22:00	10/16/25 19:42	2

Lab Sample ID: LCS 410-714026/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 715468 — **Prep Batch: 714026**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	10.0	11.1		mg/Kg		111	83 - 117
Arsenic	50.0	51.0		mg/Kg		102	84 - 114
Barium	50.0	53.8		mg/Kg		107	85 - 118
Beryllium	5.00	5.18		mg/Kg		104	74 - 120
Cadmium	5.00	5.39		mg/Kg		108	85 - 117
Chromium	50.0	52.1		mg/Kg		104	83 - 116
Copper	50.0	52.0		mg/Kg		104	83 - 115
Lead	5.00	5.49		mg/Kg		110	85 - 119
Molybdenum	5.00	5.54		mg/Kg		111	83 - 119
Nickel	50.0	51.5		mg/Kg		103	84 - 118

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-714026/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 715468 — **Prep Batch: 714026**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	10.0	10.4		mg/Kg		104	83 - 115
Silver	5.00	5.67		mg/Kg		113	87 - 119
Sodium	500	517		mg/Kg		103	81 - 120
Thallium	10.0	10.9		mg/Kg		109	86 - 116
Zinc	50.0	50.1		mg/Kg		100	84 - 116

Lab Sample ID: 410-246636-D-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 715468 — **Prep Batch: 714026**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		10.9	11.4		mg/Kg	☼	103	75 - 125
Arsenic	3.5		54.4	63.9		mg/Kg	☼	111	75 - 125
Barium	22		54.4	85.0		mg/Kg	☼	116	75 - 125
Beryllium	0.17		5.44	6.36		mg/Kg	☼	114	75 - 125
Cadmium	ND		5.44	6.32		mg/Kg	☼	116	75 - 125
Chromium	12		54.4	73.9		mg/Kg	☼	114	75 - 125
Copper	7.0		54.4	69.8		mg/Kg	☼	116	75 - 125
Lead	7.5	FH F2	5.44	15.4	FH	mg/Kg	☼	144	75 - 125
Molybdenum	0.54		5.44	6.63		mg/Kg	☼	112	75 - 125
Nickel	6.2		54.4	66.2		mg/Kg	☼	110	75 - 125
Selenium	ND		10.9	12.2		mg/Kg	☼	110	75 - 125
Silver	ND		5.44	6.38		mg/Kg	☼	116	75 - 125
Sodium	900	FL	544	638	FL	mg/Kg	☼	-48	75 - 125
Thallium	ND		10.9	12.2		mg/Kg	☼	111	75 - 125
Zinc	ND		54.4	77.0		mg/Kg	☼	107	75 - 125

Lab Sample ID: 410-246636-E-1-A MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 715468 — **Prep Batch: 714026**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		10.0	9.66		mg/Kg	☼	95	75 - 125	16	20
Arsenic	3.5		50.1	54.5		mg/Kg	☼	102	75 - 125	16	20
Barium	22		50.1	77.7		mg/Kg	☼	112	75 - 125	9	20
Beryllium	0.17		5.01	5.48		mg/Kg	☼	106	75 - 125	15	20
Cadmium	ND		5.01	5.52		mg/Kg	☼	109	75 - 125	14	20
Chromium	12		50.1	67.8		mg/Kg	☼	112	75 - 125	9	20
Copper	7.0		50.1	60.9		mg/Kg	☼	108	75 - 125	14	20
Lead	7.5	FH F2	5.01	12.0	F2	mg/Kg	☼	89	75 - 125	25	20
Molybdenum	0.54		5.01	5.92		mg/Kg	☼	107	75 - 125	11	20
Nickel	6.2		50.1	58.5		mg/Kg	☼	104	75 - 125	12	20
Selenium	ND		10.0	10.5		mg/Kg	☼	103	75 - 125	14	20
Silver	ND		5.01	5.77		mg/Kg	☼	114	75 - 125	10	20
Sodium	900	FL	501	555	FL	mg/Kg	☼	-69	75 - 125	14	20
Thallium	ND		10.0	10.6		mg/Kg	☼	106	75 - 125	14	20
Zinc	ND		50.1	66.2		mg/Kg	☼	99	75 - 125	12	20

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 410-246636-F-1-A DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 715468 — **Prep Batch: 714026**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		ND		mg/Kg	☼	NC	20
Arsenic	3.5		4.26		mg/Kg	☼	19	20
Barium	22		24.3		mg/Kg	☼	11	20
Beryllium	0.17		0.211		mg/Kg	☼	20	20
Cadmium	ND		ND		mg/Kg	☼	NC	20
Chromium	12		13.2		mg/Kg	☼	11	20
Copper	7.0		7.47		mg/Kg	☼	7	20
Lead	7.5	FH F2	11.4	F3	mg/Kg	☼	41	20
Molybdenum	0.54		0.565		mg/Kg	☼	4	20
Nickel	6.2		4.21	F3	mg/Kg	☼	39	20
Selenium	ND		ND		mg/Kg	☼	NC	20
Silver	ND		ND		mg/Kg	☼	NC	20
Sodium	900	FL	ND		mg/Kg	☼	NC	20
Thallium	ND		ND		mg/Kg	☼	NC	20
Zinc	ND		ND		mg/Kg	☼	NC	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-713129/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 714022 — **Prep Batch: 713129**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		10/14/25 14:30	10/14/25 19:09	1

Lab Sample ID: LCS 410-713129/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 714022 — **Prep Batch: 713129**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.160		mg/Kg		96	80 - 120

Lab Sample ID: 410-245788-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 714022 — **Prep Batch: 713129**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.168	0.193		mg/Kg	☼	98	80 - 120

Lab Sample ID: 410-245788-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 714022 — **Prep Batch: 713129**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.168	0.212		mg/Kg	☼	109	80 - 120	9	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 410-245788-A-2-A DU
Matrix: Solid
Analysis Batch: 714022

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 713129

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-197031-F-1 DU
Matrix: Solid
Analysis Batch: 504468

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	33		34.1		%		3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Limed Sludge

Job ID: 180-197030-1
SDG: 251009014

Metals

Prep Batch: 713129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197030-1	251009014-08	Total/NA	Solid	7471B	
MB 410-713129/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-713129/2-A	Lab Control Sample	Total/NA	Solid	7471B	
410-245788-A-2-B MS	Matrix Spike	Total/NA	Solid	7471B	
410-245788-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
410-245788-A-2-A DU	Duplicate	Total/NA	Solid	7471B	

Analysis Batch: 714022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197030-1	251009014-08	Total/NA	Solid	7471B	713129
MB 410-713129/1-A	Method Blank	Total/NA	Solid	7471B	713129
LCS 410-713129/2-A	Lab Control Sample	Total/NA	Solid	7471B	713129
410-245788-A-2-B MS	Matrix Spike	Total/NA	Solid	7471B	713129
410-245788-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	713129
410-245788-A-2-A DU	Duplicate	Total/NA	Solid	7471B	713129

Prep Batch: 714026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197030-1	251009014-08	Total/NA	Solid	3050B	
MB 410-714026/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 410-714026/2-A	Lab Control Sample	Total/NA	Solid	3050B	
410-246636-D-1-A MS	Matrix Spike	Total/NA	Solid	3050B	
410-246636-E-1-A MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
410-246636-F-1-A DU	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 714428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197030-1	251009014-08	Total/NA	Solid	6010D	714026
MB 410-714026/1-A	Method Blank	Total/NA	Solid	6010D	714026
LCS 410-714026/2-A	Lab Control Sample	Total/NA	Solid	6010D	714026

Analysis Batch: 715468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197030-1	251009014-08	Total/NA	Solid	6020B	714026
MB 410-714026/1-A	Method Blank	Total/NA	Solid	6020B	714026
LCS 410-714026/2-A	Lab Control Sample	Total/NA	Solid	6020B	714026
410-246636-D-1-A MS	Matrix Spike	Total/NA	Solid	6020B	714026
410-246636-E-1-A MSD	Matrix Spike Duplicate	Total/NA	Solid	6020B	714026
410-246636-F-1-A DU	Duplicate	Total/NA	Solid	6020B	714026

General Chemistry

Analysis Batch: 504468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-197030-1	251009014-08	Total/NA	Solid	SM 2540G	
180-197031-F-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251009014**

Tests to be Performed: See attached Parameter List

Additional Information : Quarterly Limed Sludge

Sample composited on Oct 9 from grabs collected on Oct 1, Oct 2, Oct 5, Oct 6, Oct 7, Oct 8, Oct 9

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers
251009014-08	10/9/25	0957	S	N	C	Always maintain sample/extract at 25°C when reading any pH result. Solids must be analyzed by 2540G. All methods must be accredited by PADEP or NELAC. Email a copy of LIMS login with signed COC as soon as possible after receipt. Report Level II data package. Document ASTM Extraction date/time And out of hold extraction on report.	1

180-197030 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	10/10/25	0950		Eurofins Pgh	10-10-25	0950
	EPIT/NE	10-10-25	1250		EPIT/NE	10/10/25	1250
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: _____ Date: 10/10/25

Supervisor Review: Initials: _____ Date: 10-9-25

METALS

COMPOSITE

Environmental Compliance Laboratory

Contract Lab portion of Quarterly Analysis when shared with ALCOSAN Lab- PLUS metals

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM & LIMED SLUDGE- QUARTERLY			
7 days of a Grab sample to generate a Composite* (minimum 6 grabs) Each sample matrix is analyzed for all parameters listed. ---------- NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlimed sludge is included, analyses are performed by contract laboratory(s) only- **see Residuals for which quarter.** **Check reporting limit requirments.**	Quarterly	METALS ONLY COMPOSITE (Half Pint) Lancaster Lab MISCELLANEOUS (SOLID) Arsenic, Barium, Cadmium, Chromium, Lead, Thallium, Selenium, Silver, Antimony, Beryllium, Molybdenum, Nickel, Zinc, Boron, Total Sulfur (SW846 6010), Copper, Sodium, Solids, Total (SM2540G), Mercury	Laboratory

Red indicates analyses performed by a contract laboratory

SEND ONE HALF PINT OF COMPOSITE

Log metals sample, and metals TS sample, with separate LIMS ID number and add "report due by "XDATEX" on COC

Alcosan #25 +0.1

J1	0.8	0.9
J2	0.9	1.0

180-197030 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-546786.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-197030-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 10/20/2025			
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010D/3050B/Sulfur and Boron	7471B/7471B_Prep/Mercury	6020B/3050B/Quarterly Custom Total Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
251009014-08 (180-197030-1)	10/9/25	09:57 Eastern	G	Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
James J. Hinkelman	10/13/25 13:00	EPITHNE	MA	10.13.25 1400	ELTE
MA	10.13.25 1845	ELTE			
				10/13/25 1845	

Custody Seals Intact: ☑ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: R 1.9 C 1.8

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-197030-1
SDG Number: 251009014

Login Number: 197030
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-197030-1
SDG Number: 251009014

Login Number: 197030
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/13/25 07:01 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251001010 **Sample Date:** 10/1/2025

Sample ID Number: 251001010-01 **Sample Type:** GRAB

Customer Sample Number: PCB Grabs

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Phenolics, Total	Contract Lab	EurofinsPittsburgh	10/6/2025	2.2	mg/kg dry	0.59		
Contract Lab								
2,3,7,8-TCDD	Contract Lab	EurofinsLancaster	10/19/2025	<28	pg/g Dry	28		
PCBs	Contract Lab	EurofinsPittsburgh	10/3/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	10/2/2025	32	%	0.50		

Printed Date
Friday, November 14, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251001010 **Sample Date:** 10/1/2025

Sample ID Number: 251001010-01 **Sample Type:** GRAB

Customer Sample Number: PCB Grabs

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

Grabs

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hower

11-14-25

Date

Printed Date
Friday, November 14, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251001010 **Sample Date:** 10/1/2025

Sample ID Number: 251001010-02 **Sample Type:** GRAB

Customer Sample Number: HEM Grabs

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
Hexane Extractable Material	Contract Lab	EurofinsLancaster	10/7/2025	<5.2	mg/L	5.2		
Chemistry								
Hexane Extractable Material	Contract Lab	EurofinsLancaster	10/7/2025	23000	mg/kg dry	1800		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	10/2/2025	32	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

Grabs

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

11-14-25

Date

Printed Date
Friday, November 14, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Limed Sludge

Lab ID Number: 251001010 **Sample Date:** 10/1/2025

Sample ID Number: 251001010-03 **Sample Type:** GRAB

Customer Sample Number: VOA Grabs

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	10/2/2025	32	%	0.50		
Volatile Organics								
Volatile Organics	Contract Lab	EurofinsLancaster	10/10/2025	See attached report	ug/Kg Dry			Samples were reanalyzed (RA) by Eurofins within the hold time, see attached report.

Data Qualifier **Data Qualifier Description**

Comments:

Grabs

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Larissa Hawk

11-14-25

Date

Printed Date
Friday, November 14, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 10/20/2025 10:18:15 PM

JOB DESCRIPTION

Quaterly Limed Sludge
251001010

JOB NUMBER

180-196587-2

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
10/20/2025 10:18:15 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 12
Chain of Custody 13
Receipt Checklists 19

Job Narrative
180-196587-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-anelyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 10/1/2025 1:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0°C and 1.9°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

Dioxin
Method 8290A: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: 251001010-01 (180-196587-1). The reporting limits (RLs) have been adjusted proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-2
SDG: 251001010

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitetion (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-2
SDG: 251001010

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-2
SDG: 251001010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-196587-1	251001010-01	Solid	10/01/25 06:05	10/01/25 13:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-2
SDG: 251001010

Method	Method Description	Protocol	Laboratory
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	ELLE
HRMS-Soxtherm	Soxtherm Extraction	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-2
SDG: 251001010

Client Sample ID: 251001010-01
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-1
Matrix: Solid
Percent Solids: 32.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Soxtherm			1.09 g	20 uL	715418	10/16/25 20:59	SA8Q	ELLE
Total/NA	Analysis	8290A		1	20 uL	20 uL	716048	10/19/25 03:38	AQ46	ELLE
	Instrument ID: DF19780B									

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

SA8Q = Erik Greavison

Batch Type: Analysis

AQ46 = Joel Denlinger

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-2
SDG: 251001010

Client Sample ID: 251001010-01
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-1
Matrix: Solid
Percent Solids: 32.4

Method: SW846 6290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		28		pg/g	☼	10/16/25 20:59	10/19/25 03:38	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*80*		*40 - 135*	*10/16/25 20:59*	*10/19/25 03:38*	*1*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-2
SDG: 251001010

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 410-715418/1-A
Matrix: Solid
Analysis Batch: 716072

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 715418

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0		pg/g		10/16/25 20:59	10/19/25 02:01	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*88*		*40 - 136*	*10/16/25 20:59*	*10/19/25 02:01*	*1*

Lab Sample ID: LCS 410-715418/2-A
Matrix: Solid
Analysis Batch: 716072

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 715418

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,3,7,8-TCDD	20.0	20.1		pg/g		100	66 - 120

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*71*		*40 - 135*

Lab Sample ID: LCSD 410-715418/3-A
Matrix: Solid
Analysis Batch: 716072

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 715418

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,3,7,8-TCDD	20.0	19.1		pg/g		95	66 - 120	5	25

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*86*		*40 - 135*

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-2
SDG: 251001010

Specialty Organics

Prep Batch: 715418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-1	251001010-01	Total/NA	Solid	HRMS-Soxtherm	
MB 410-715418/1-A	Method Blank	Total/NA	Solid	HRMS-Soxtherm	
LCS 410-715418/2-A	Lab Control Sample	Total/NA	Solid	HRMS-Soxtherm	
LCSD 410-715418/3-A	Lab Control Sample Dup	Total/NA	Solid	HRMS-Soxtherm	

Analysis Batch: 716048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-1	251001010-01	Total/NA	Solid	8290A	715418

Analysis Batch: 716072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-715418/1-A	Method Blank	Total/NA	Solid	8290A	715418
LCS 410-715418/2-A	Lab Control Sample	Total/NA	Solid	8290A	715418
LCSD 410-715418/3-A	Lab Control Sample Dup	Total/NA	Solid	8290A	715418

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251001010**

Additional Information : Quarterly Limed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	See attached Parameter List	HEM, ASTM HEM, % total solids	VOA EPA 8260D *	Total Solids		
							Number of Containers					
251001010-01	10/1/25	0605	S	N	G	Always maintain sample/extract at	1					
251001010-02	10/1/25	0605	S	N	G	25°C when reading any pH result.		1				
251001010-03	10/1/25	0605	S	N*	G	Solids must be analyzed by 2540G.			6	1		
						All methods must be accredited by						
						PADEP or NELAC.						
						Email a copy of LIMS login with signed						
						COC as soon as possible after receipt.						
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-196587 Chain of Custody

Tests to be Performed

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	10.01.25	1257		Eurofins Pgh	10-1-25	1251
	EPITAE	10-1-25	1330		EPITAE	10/1/25	1330
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: YM Date: 10/1/25

Supervisor Review: Initials: [illegible] Date: 10-1-25

alcosan

Environmental Compliance Laboratory

Contract Lab GRAB portion of Quarterly Analysis when shared with ALCOSAN Lab

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM & LIMED SLUDGE- QUARTERLY			
Check reporting limit requirements.	Quarterly	AMBER GRAB (1 Amber quart) PCBs 2 3 7 8-TCDD* Phenolics * Solids Total (SM2540G)* HEM GRAB (1 clear pint) Oil & Grease * Solids, Total (SM2540G)* ASTM Oil & Grease * VOA GRAB (1 vial + 1 jar for TS) 8260 Volatile Organics * Solids Total (SM2540G)* * Analyses done on a separate grab sample for each matrix.	Laboratory

Red indicates analyses performed by a contract laboratory

SEND 1 CLEAR PINT GRAB FOR HEM, 1 AMBER QUART GRAB FOR EACH LOCATION, AND 1 VOA VIAL GRAB WITH 1 JAR FOR TS)

ALCOSAN Laboratory - VOA Solid Matrix Prep Log (SW846-8260)

Sample Name	LIMS ID	Vial #	Chemical Type (MEOH/ Sodium Bisulfate)	Control No.	Sample Weight (grams)	Date Prepared	Prep/Collection Analyst Initials:
LIMED GRAB LL5	250722014-01	916	Sodium Bisulf.	63025A	5.13	7-21-25	TAKAC
LL5	JAR Collection 11:02AM	917			5.23	1:18	
LL1		918			1.02		
LL1		919			1.08		
HL5		920	MeOH	20525B	5.05		
HL5		921			5.11		
FULL		922	NA	NA	NA		
FULL		923					
ASH GRAB LL5	251001011-03	100	Sodium Bisulfate	63025A	5.03	10-1-25	TAKAC
LL5	JAR Collection 7:05 AM	101			5.13	8:00	
LL1		102			1.04		
LL1		103			1.10		
HL5		104	MeOH	32625A	5.00		
HL5		105			5.00		
FULL		106	NA	NA	NA		
FULL		107					
				WK 10-1-25			

ALCOSAN Laboratory - VOA Solid Matrix Prep Log (SW846-8260)

Sample Name	LIMS ID	Vial #	Chemical Type (MEOH/ Sodium Bisulfate)	Control No.	Sample Weight (grams)	Date Prepared	Prep/Collection Analyst Initials:
Grit Grab LLS	251001012-03	108	~~Sodium Bif~~ Bisulf.	63025A	5.29	10-1-25 8:15	TAKAC
LLS	JAR Collection 7:10 Am	109			5.00		
LLI		110			1.06		
LLI		111			1.00		
HLS		112	MeOH	32625A	5.11		
HLS		113			5.15		
FULL		114	NA	NA	NA		
FULL		115					
Scum Grab LLS	251001013-03	116	Sodium Bisulf	63025A	5.03	10-1-25 8:30	TAKAC
LLS	JAR collection 7:55 Am	117			5.27		
LLI		118			1.02		
LLI		119			1.01		
HLS		120	MeOH	32625A	5.46		
HLS		121			5.51		
FULL		122	NA	NA	NA		
FULL		123					
				WS 10-1-25			

Sample Name	LIMS ID	Vial #	Chemical Type (MEOH/ Sodium Bisulfate)	Control No.	Sample Weight (grams)	Date Prepared	Prep/Collection Analyst Initials:
LINED CAKE GRAB LL5	251001010-03	124	Sodium Bisulf	63025A	5.06	10-1-25 8:55	TAKAC
LL5	JAR Collection 6:05 am	125			5.08		
LL1		126			1.04		
LL1		127			1.02		
HL5		128	MeOH	32625A	5.07		
HL5		129			5.07		
FULL		130	NA	NA	NA		
FULL		131					

JM #25

CF+0.1

J3	0.9	1.0
J4	1.8	1.9

180-196587 Waybill

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-196587-2
SDG Number: 251001010

Login Number: 196587
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-196587-2
SDG Number: 251001010

Login Number: 196587
List Number: 2
Creator: McDonald, Teigan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/03/25 10:41 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 10/17/2025 4:59:42 PM

JOB DESCRIPTION

Quaterly Limed Sludge
251001010

JOB NUMBER

180-196587-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
10/17/2025 4:59:42 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 11
QC Sample Results 17
QC Association Summary 28
Chain of Custody 30
Receipt Checklists 37

Job Narrative
180-196587-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 10/1/2025 1:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.0°C and 1.9°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Method 8260D: The following sample was diluted due to the nature of the sample matrix: 251001010-03 (180-196587-3). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 410-710677 recovered above the upper control limit for Bromomethane, Chloroethane, Dibromochloromethane and Vinyl acetate. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D: Internal standard (ISTD) response for the following sample was outside control limits: 251001010-03 (180-196587-3). The sample(s) was re-extracted and/or re-analyzed and ISTD response was outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PCBs
Method 8082A: The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: 251001010-01 (180-196587-1), (LCS 180-503967/2-A), (MB 180-503967/1-A), (180-196601-A-1-C), (180-196601-A-1-A MS) and (180-196601-A-1-B MSD).6215174

Method 8082A: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: 251001010-01 (180-196587-1), (LCS 180-503967/2-A), (MB 180-503967/1-A), (180-196601-A-1-C), (180-196601-A-1-A MS) and (180-196601-A-1-B MSD).6239381
6513163

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
^c	CCV Recovery is outside acceptance limits.
S1-	Surrogate recovery exceeds control limits, low biased.

General Chemistry

Qualifier	Qualifier Description
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-196587-1	251001010-01	Solid	10/01/25 06:05	10/01/25 13:30	Pennsylvania
180-196587-2	251001010-02	Solid	10/01/25 06:05	10/01/25 13:30	Pennsylvania
180-196587-3	251001010-03	Solid	10/01/25 06:05	10/01/25 13:30	Pennsylvania

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
1864B	HEM and SGT-HEM	1664B	ELLE
9071B	HEM and SGT-HEM	SW846	ELLE
EPA 9065	Phenolics, Total Recoverable	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
5035	Closed System Purge and Trap	SW846	ELLE
9071B	Preparation, HEM and SGT-HEM	SW846	ELLE
D3987-85	ASTM Leaching Procedure	ASTM	ELLE
Distill/Phenol	Distillation, Phenolics	None	EET PIT

Protocol References:

1664B = EPA-821-98-002
ASTM = ASTM International
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Client Sample ID: 251001010-01 — Lab Sample ID: 180-196587-1

Date Collected: 10/01/25 06:05 — **Matrix: Solid**
Date Received: 10/01/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			503953	10/02/25 17:00	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251001010-01 — Lab Sample ID: 180-196587-1

Date Collected: 10/01/25 06:05 — **Matrix: Solid**
Date Received: 10/01/25 13:30 — **Percent Solids: 32.4**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	20.0 mL	503967	10/03/25 05:20	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	503968	10/03/25 15:57	JMO	EET PIT
	Instrument ID: CHGC20									
Total/NA	Prep	Distill/Phenol			0.52 g	10.0 mL	504049	10/06/25 08:05	RSK	EET PIT
Total/NA	Analysis	EPA 9065		1			504085	10/06/25 12:46	RSK	EET PIT
	Instrument ID: SHAMU									

Client Sample ID: 251001010-02 — Lab Sample ID: 180-196587-2

Date Collected: 10/01/25 06:05 — **Matrix: Solid**
Date Received: 10/01/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			100.11 g	2000 mL	709533	10/06/25 14:30	UNWS	ELLE
ASTM Leach	Analysis	1664B		1	960 mL	1000 mL	710531	10/07/25 20:26	QT6L	ELLE
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540G		1			503953	10/02/25 17:00	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 251001010-02 — Lab Sample ID: 180-196587-2

Date Collected: 10/01/25 06:05 — **Matrix: Solid**
Date Received: 10/01/25 13:30 — **Percent Solids: 32.3**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9071B			20.17 g	20.00 g	709276	10/05/25 10:25	QT6L	ELLE
Total/NA	Analysis	9071B		1			710502	10/07/25 18:42	QT6L	ELLE
	Instrument ID: NOEQUIP									

Client Sample ID: 251001010-03 — Lab Sample ID: 180-196587-3

Date Collected: 10/01/25 06:05 — **Matrix: Solid**
Date Received: 10/01/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			503953	10/02/25 17:00	ELS	EET PIT
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Client Sample ID: 251001010-03
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-3
Matrix: Solid
Percent Solids: 32.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.07 g	5 mL	709494	10/06/25 08:39	H4VV	ELLE
Total/NA	Analysis	8260D		50	5 mL	5 mL	710677	10/08/25 18:01	WJ7F	ELLE
	Instrument ID: 7566									
Total/NA	Prep	5035	RA		5.07 g	5 mL	709494	10/06/25 08:39	H4VV	ELLE
Total/NA	Analysis	8260D	RA	50	5 mL	5 mL	711693	10/10/25 00:54	Y6ZN	ELLE
	Instrument ID: 7566									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Prep
  - MKK = Mary Kenny
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - JMO = John Oravec
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Leach
  - UNWS = Nicholas Shroyer
- Batch Type: Prep
  - H4VV = Lisa Eberly
  - QT6L = Tesfaye Dabsu
- Batch Type: Analysis
  - QT6L = Tesfaye Dabsu
  - WJ7F = Hannah Carter
  - Y6ZN = Marissa Drexinger

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Client Sample ID: 251001010-01
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-1
Matrix: Solid
Percent Solids: 32.4

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		51		ug/Kg	☼	10/03/25 05:20	10/03/25 15:57	1
PCB-1221	ND		51		ug/Kg	☼	10/03/25 05:20	10/03/25 15:57	1
PCB-1232	ND		51		ug/Kg	☼	10/03/25 05:20	10/03/25 15:57	1
PCB-1242	ND		51		ug/Kg	☼	10/03/25 05:20	10/03/25 15:57	1
PCB-1248	ND		51		ug/Kg	☼	10/03/25 05:20	10/03/25 15:57	1
PCB-1254	ND		51		ug/Kg	☼	10/03/25 05:20	10/03/25 15:57	1
PCB-1260	ND		51		ug/Kg	☼	10/03/25 05:20	10/03/25 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*66*		*17 - 144*	*10/03/25 05:20*	*10/03/25 15:57*	*1*
Tetrachloro-m-xylene (Surr)	*69*		*17 - 144*	*10/03/25 05:20*	*10/03/25 15:57*	*1*
DCB Decachlorobiphenyl (Surr)	*79*		*26 - 142*	*10/03/25 05:20*	*10/03/25 15:57*	*1*
DCB Decachlorobiphenyl (Surr)	*58*		*26 - 142*	*10/03/25 05:20*	*10/03/25 15:57*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (SW846 EPA 9065)	**2.2**		0.59		mg/Kg	☼	10/06/25 08:05	10/06/25 12:46	1
Total Solids (SM 2540G)	**32**		0.50		%			10/02/25 17:00	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Client Sample ID: 251001010-02
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-2
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**32**		0.50		%			10/02/25 17:00	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (1664B)	ND		5.2		mg/L			10/07/25 20:26	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Client Sample ID: 251001010-02
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-2
Matrix: Solid
Percent Solids: 32.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (SW846 9071B	23000		1800		mg/Kg	☼	10/05/25 10:25	10/07/25 18:42	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Client Sample ID: 251001010-03
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-3
Matrix: Solid
Percent Solids: 32.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,1,2,2-Tetrachloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,1,2-Trichloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,1-Dichloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,1-Dichloroethene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,2-Dichlorobenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,2-Dichloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,2-Dichloropropane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,3-Dichlorobenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
1,4-Dichlorobenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Methyl Ethyl Ketone	**9800**	***3**	2600		ug/Kg	☼	10/08/25 08:39	10/08/25 18:01	50
2-Chloroethyl vinyl ether	ND		2600		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
2-Hexanone	ND		2600		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
methyl isobutyl ketone	ND		2600		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Acetone	**24000**	***3**	5200		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Benzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Bromodichloromethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Bromoform	ND		2600		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Bromomethane	ND	*3 ^c *+	1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Carbon disulfide	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Carbon tetrachloride	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Chlorobenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Chloroethane	ND	*3 ^c *+	1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Chloroform	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Chloromethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
cis-1,3-Dichloropropene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Dibromochloromethane	ND	^c	1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Ethylbenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
m-Xylene & p-Xylene	ND		1300		ug/Kg	☼	10/08/25 08:39	10/08/25 18:01	50
Methylene Chloride	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
o-Xylene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Styrene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Tetrachloroethene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Toluene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
trans-1,2-Dichloroethene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
trans-1,3-Dichloropropene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Trichloroethene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Trichlorofluoromethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Vinyl acetate	ND	*+ ^c	2600		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Vinyl chloride	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50
Xylenes, Total	ND		1300		ug/Kg	☼	10/06/25 08:39	10/08/25 18:01	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*56*		*54 - 135*	*10/06/25 08:39*	*10/08/25 18:01*	*50*
4-Bromofluorobenzene (Surr)	*57*		*50 - 131*	*10/06/25 08:39*	*10/08/25 18:01*	*50*
Dibromofluoromethane (Surr)	*43*	*S1-*	*50 - 141*	*10/06/25 08:39*	*10/08/25 18:01*	*50*
Toluene-d8 (Surr)	*63*		*52 - 141*	*10/08/25 08:39*	*10/08/25 18:01*	*50*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Client Sample ID: 251001010-03
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-3
Matrix: Solid
Percent Solids: 32.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
1,1,2,2-Tetrachloroethane	ND		1300		ug/Kg	☼	10/08/25 08:39	10/10/25 00:54	50
1,1,2-Trichloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
1,1-Dichloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
1,1-Dichloroethene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
1,2-Dichlorobenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
1,2-Dichloroethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
1,2-Dichloropropane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
1,3-Dichlorobenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
1,4-Dichlorobenzene	ND		1300		ug/Kg	☼	10/08/25 08:39	10/10/25 00:54	50
Methyl Ethyl Ketone	**13000**	***3**	2600		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
2-Chloroethyl vinyl ether	ND		2600		ug/Kg	☼	10/08/25 08:39	10/10/25 00:54	50
2-Hexanone	ND		2600		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
methyl isobutyl ketone	ND		2600		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Acetone	**38000**	***3**	5200		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Benzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Bromodichloromethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Bromoform	ND		2600		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Bromomethane	ND	*3 *+ ^c	1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Carbon disulfide	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Carbon tetrachloride	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Chlorobenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Chloroethane	ND	*3 *+ ^c	1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Chloroform	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Chloromethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
cis-1,3-Dichloropropene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Dibromochloromethane	ND		1300		ug/Kg	☼	10/08/25 08:39	10/10/25 00:54	50
Ethylbenzene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
m-Xylene & p-Xylene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Methylene Chloride	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
o-Xylene	ND		1300		ug/Kg	☼	10/08/25 08:39	10/10/25 00:54	50
Styrene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Tetrachloroethene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Toluene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
trans-1,2-Dichloroethene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
trans-1,3-Dichloropropene	ND		1300		ug/Kg	☼	10/08/25 08:39	10/10/25 00:54	50
Trichloroethene	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Trichlorofluoromethane	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Vinyl acetate	ND	^c *+	2600		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50
Vinyl chloride	ND		1300		ug/Kg	☼	10/08/25 08:39	10/10/25 00:54	50
Xylenes, Total	ND		1300		ug/Kg	☼	10/06/25 08:39	10/10/25 00:54	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*61*		*54 - 135*	*10/06/25 08:39*	*10/10/25 00:54*	*50*
4-Bromofluorobenzene (Surr)	*58*		*50 - 131*	*10/06/25 08:39*	*10/10/25 00:54*	*50*
Dibromofluoromethane (Surr)	*39*	*S1-*	*50 - 141*	*10/06/25 08:39*	*10/10/25 00:54*	*50*
Toluene-d8 (Surr)	*62*		*52 - 141*	*10/06/25 08:39*	*10/10/25 00:54*	*50*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Client Sample ID: 251001010-03
Date Collected: 10/01/25 06:05
Date Received: 10/01/25 13:30

Lab Sample ID: 180-196587-3
Matrix: Solid
Percent Solids: 32.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**32**		0.50		%			10/02/25 17:00	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-710677/10
Matrix: Solid
Analysis Batch: 710677

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250		ug/Kg			10/08/25 11:45	50
1,1,2,2-Tetrachloroethane	ND		250		ug/Kg			10/08/25 11:45	50
1,1,2-Trichloroethane	ND		250		ug/Kg			10/08/25 11:45	50
1,1-Dichloroethane	ND		250		ug/Kg			10/08/25 11:45	50
1,1-Dichloroethene	ND		250		ug/Kg			10/08/25 11:45	50
1,2-Dichlorobenzene	ND		250		ug/Kg			10/08/25 11:45	50
1,2-Dichloroethane	ND		250		ug/Kg			10/08/25 11:45	50
1,2-Dichloropropane	ND		250		ug/Kg			10/08/25 11:45	50
1,3-Dichlorobenzene	ND		250		ug/Kg			10/08/25 11:45	50
1,4-Dichlorobenzene	ND		250		ug/Kg			10/08/25 11:45	50
Methyl Ethyl Ketone	ND		500		ug/Kg			10/08/25 11:45	50
2-Chloroethyl vinyl ether	ND		500		ug/Kg			10/08/25 11:45	50
2-Hexanone	ND		500		ug/Kg			10/08/25 11:45	50
methyl isobutyl ketone	ND		500		ug/Kg			10/08/25 11:45	50
Acetone	ND		1000		ug/Kg			10/08/25 11:45	50
Benzene	ND		250		ug/Kg			10/08/25 11:45	50
Bromodichloromethane	ND		250		ug/Kg			10/08/25 11:45	50
Bromoform	ND		500		ug/Kg			10/08/25 11:45	50
Bromomethane	ND		250		ug/Kg			10/08/25 11:45	50
Carbon disulfide	ND		250		ug/Kg			10/08/25 11:45	50
Carbon tetrachloride	ND		250		ug/Kg			10/08/25 11:45	50
Chlorobenzene	ND		250		ug/Kg			10/08/25 11:45	50
Chloroethane	ND		250		ug/Kg			10/08/25 11:45	50
Chloroform	ND		250		ug/Kg			10/08/25 11:45	50
Chloromethane	ND		250		ug/Kg			10/08/25 11:45	50
cis-1,3-Dichloropropene	ND		250		ug/Kg			10/08/25 11:45	50
Dibromochloromethane	ND		250		ug/Kg			10/08/25 11:45	50
Ethylbenzene	ND		250		ug/Kg			10/08/25 11:45	50
m-Xylene & p-Xylene	ND		250		ug/Kg			10/08/25 11:45	50
Methylene Chloride	ND		250		ug/Kg			10/08/25 11:45	50
o-Xylene	ND		250		ug/Kg			10/08/25 11:45	50
Styrene	ND		250		ug/Kg			10/08/25 11:45	50
Tetrachloroethene	ND		250		ug/Kg			10/08/25 11:45	50
Toluene	ND		250		ug/Kg			10/08/25 11:45	50
trans-1,2-Dichloroethene	ND		250		ug/Kg			10/08/25 11:45	50
trans-1,3-Dichloropropene	ND		250		ug/Kg			10/08/25 11:45	50
Trichloroethene	ND		250		ug/Kg			10/08/25 11:45	50
Trichlorofluoromethane	ND		250		ug/Kg			10/08/25 11:45	50
Vinyl acetate	ND		500		ug/Kg			10/08/25 11:45	50
Vinyl chloride	ND		250		ug/Kg			10/08/25 11:45	50
Xylenes, Total	ND		250		ug/Kg			10/08/25 11:45	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*54 - 135*		*10/08/25 11:45*	*50*
4-Bromofluorobenzene (Surr)	*89*		*50 - 131*		*10/08/25 11:45*	*50*
Dibromofluoromethane (Surr)	*93*		*50 - 141*		*10/08/25 11:45*	*50*
Toluene-d8 (Surr)	*94*		*52 - 141*		*10/08/25 11:45*	*50*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-710677/5
Matrix: Solid
Analysis Batch: 710677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1000	993		ug/Kg		99	69 - 123
1,1,2,2-Tetrachloroethane	1000	1090		ug/Kg		109	69 - 125
1,1,2-Trichloroethane	1000	1050		ug/Kg		105	76 - 120
1,1-Dichloroethane	1000	1030		ug/Kg		103	68 - 120
1,1-Dichloroethene	1000	1060		ug/Kg		106	73 - 129
1,2-Dichlorobenzene	1000	918		ug/Kg		92	74 - 120
1,2-Dichloroethane	1000	1030		ug/Kg		103	72 - 124
1,2-Dichloropropane	1000	997		ug/Kg		100	70 - 124
1,3-Dichlorobenzene	1000	940		ug/Kg		94	75 - 120
1,4-Dichlorobenzene	1000	946		ug/Kg		95	76 - 122
Methyl Ethyl Ketone	12500	11400		ug/Kg		92	48 - 142
2-Chloroethyl vinyl ether	1000	991		ug/Kg		99	68 - 120
2-Hexanone	12500	12900		ug/Kg		103	54 - 140
methyl Isobutyl ketone	12500	12600		ug/Kg		101	67 - 138
Acetone	12500	10700		ug/Kg		85	28 - 169
Benzene	1000	1020		ug/Kg		102	80 - 120
Bromodichloromethane	1000	1070		ug/Kg		107	70 - 120
Bromoform	1000	944		ug/Kg		94	66 - 127
Bromomethane	1000	1320	*+	ug/Kg		132	60 - 120
Carbon disulfide	1000	901		ug/Kg		90	64 - 133
Carbon tetrachloride	1000	1000		ug/Kg		100	64 - 120
Chlorobenzene	1000	1010		ug/Kg		101	74 - 120
Chloroethane	1000	1180		ug/Kg		118	55 - 127
Chloroform	1000	1040		ug/Kg		104	73 - 120
Chloromethane	1000	807		ug/Kg		81	43 - 120
cis-1,3-Dichloropropene	1000	995		ug/Kg		100	66 - 120
Dibromochloromethane	1000	1050		ug/Kg		105	69 - 125
Ethylbenzene	1000	998		ug/Kg		100	72 - 118
m-Xylene & p-Xylene	2000	1970		ug/Kg		98	80 - 120
Methylene Chloride	1000	1040		ug/Kg		104	76 - 122
o-Xylene	1000	963		ug/Kg		96	75 - 120
Styrene	1000	984		ug/Kg		98	76 - 120
Tetrachloroethene	1000	986		ug/Kg		99	73 - 120
Toluene	1000	1020		ug/Kg		102	71 - 120
trans-1,2-Dichloroethene	1000	1040		ug/Kg		104	71 - 126
trans-1,3-Dichloropropene	1000	1030		ug/Kg		103	68 - 122
Trichloroethene	1000	974		ug/Kg		97	72 - 120
Trichlorofluoromethane	1000	747		ug/Kg		75	49 - 120
Vinyl chloride	1000	866		ug/Kg		87	52 - 120
Xylenes, Total	3000	2930		ug/Kg		98	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*54 - 135*
4-Bromofluorobenzene (Surr)	*96*		*50 - 131*
Dibromofluoromethane (Surr)	*94*		*50 - 141*
Toluene-d8 (Surr)	*97*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-710677/7
Matrix: Solid
Analysis Batch: 710677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	5000	7130	*+	ug/Kg		143	68 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*54 - 135*
4-Bromofluorobenzene (Surr)	*91*		*50 - 131*
Dibromofluoromethane (Surr)	*96*		*50 - 141*
Toluene-d8 (Surr)	*96*		*52 - 141*

Lab Sample ID: LCSD 410-710677/6
Matrix: Solid
Analysis Batch: 710677

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	1020		ug/Kg		102	69 - 123	3	30
1,1,2,2-Tetrachloroethane	1000	1090		ug/Kg		109	69 - 125	1	30
1,1,2-Trichloroethane	1000	1040		ug/Kg		104	76 - 120	1	30
1,1-Dichloroethane	1000	1040		ug/Kg		104	68 - 120	1	30
1,1-Dichloroethene	1000	1060		ug/Kg		106	73 - 129	0	30
1,2-Dichlorobenzene	1000	919		ug/Kg		92	74 - 120	0	30
1,2-Dichloroethane	1000	1040		ug/Kg		104	72 - 124	1	30
1,2-Dichloropropane	1000	1020		ug/Kg		102	70 - 124	2	30
1,3-Dichlorobenzene	1000	955		ug/Kg		96	75 - 120	2	30
1,4-Dichlorobenzene	1000	958		ug/Kg		96	76 - 122	1	30
Methyl Ethyl Ketone	12500	12700		ug/Kg		102	48 - 142	11	30
2-Chloroethyl vinyl ether	1000	997		ug/Kg		100	66 - 120	1	30
2-Hexanone	12500	13000		ug/Kg		104	54 - 140	1	30
methyl isobutyl ketone	12500	12600		ug/Kg		101	67 - 138	0	30
Acetone	12500	10200		ug/Kg		82	28 - 169	4	30
Benzene	1000	1030		ug/Kg		103	80 - 120	1	30
Bromodichloromethane	1000	1080		ug/Kg		108	70 - 120	1	30
Bromoform	1000	933		ug/Kg		93	66 - 127	1	30
Bromomethane	1000	1380	*+	ug/Kg		138	60 - 120	4	30
Carbon disulfide	1000	924		ug/Kg		92	64 - 133	3	30
Carbon tetrachloride	1000	1030		ug/Kg		103	64 - 120	3	30
Chlorobenzene	1000	1030		ug/Kg		103	74 - 120	2	30
Chloroethane	1000	1390	*+	ug/Kg		139	55 - 127	16	30
Chloroform	1000	1060		ug/Kg		106	73 - 120	3	30
Chloromethane	1000	788		ug/Kg		79	43 - 120	2	30
cis-1,3-Dichloropropene	1000	1010		ug/Kg		101	66 - 120	1	30
Dibromochloromethane	1000	1050		ug/Kg		105	69 - 125	0	30
Ethylbenzene	1000	1020		ug/Kg		102	72 - 118	2	30
m-Xylene & p-Xylene	2000	1980		ug/Kg		99	80 - 120	1	30
Methylene Chloride	1000	1030		ug/Kg		103	76 - 122	1	30
o-Xylene	1000	954		ug/Kg		95	75 - 120	1	30
Styrene	1000	991		ug/Kg		99	76 - 120	1	30
Tetrachloroethene	1000	995		ug/Kg		100	73 - 120	1	30
Toluene	1000	1030		ug/Kg		103	71 - 120	0	30
trans-1,2-Dichloroethene	1000	1070		ug/Kg		107	71 - 126	3	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-710677/6
Matrix: Solid
Analysis Batch: 710677

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,3-Dichloropropene			1000	1030		ug/Kg		103	68 - 122	0	30
Trichloroethene			1000	990		ug/Kg		99	72 - 120	2	30
Trichlorofluoromethane			1000	721		ug/Kg		72	49 - 120	3	30
Vinyl chloride			1000	854		ug/Kg		85	52 - 120	1	30
Xylenes, Total			3000	2930		ug/Kg		98	75 - 120	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*54 - 135*
4-Bromofluorobenzene (Surr)	*97*		*50 - 131*
Dibromofluoromethane (Surr)	*96*		*50 - 141*
Toluene-d8 (Surr)	*98*		*52 - 141*

Lab Sample ID: LCSD 410-710677/8
Matrix: Solid
Analysis Batch: 710677

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate			5000	7010	*+	ug/Kg		140	68 - 128	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*54 - 135*
4-Bromofluorobenzene (Surr)	*94*		*50 - 131*
Dibromofluoromethane (Surr)	*97*		*50 - 141*
Toluene-d8 (Surr)	*98*		*52 - 141*

Lab Sample ID: MB 410-711693/6
Matrix: Solid
Analysis Batch: 711693

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250		ug/Kg			10/09/25 21:06	50
1,1,2,2-Tetrachloroethane	ND		250		ug/Kg			10/09/25 21:06	50
1,1,2-Trichloroethane	ND		250		ug/Kg			10/09/25 21:06	50
1,1-Dichloroethane	ND		250		ug/Kg			10/09/25 21:06	50
1,1-Dichloroethene	ND		250		ug/Kg			10/09/25 21:06	50
1,2-Dichlorobenzene	ND		250		ug/Kg			10/09/25 21:06	50
1,2-Dichloroethane	ND		250		ug/Kg			10/09/25 21:06	50
1,2-Dichloropropane	ND		250		ug/Kg			10/09/25 21:06	50
1,3-Dichlorobenzene	ND		250		ug/Kg			10/09/25 21:06	50
1,4-Dichlorobenzene	ND		250		ug/Kg			10/09/25 21:06	50
Methyl Ethyl Ketone	ND		500		ug/Kg			10/09/25 21:06	50
2-Chloroethyl vinyl ether	ND		500		ug/Kg			10/09/25 21:06	50
2-Hexanone	ND		500		ug/Kg			10/09/25 21:06	50
methyl isobutyl ketone	ND		500		ug/Kg			10/09/25 21:06	50
Acetone	ND		1000		ug/Kg			10/09/25 21:06	50
Benzene	ND		250		ug/Kg			10/09/25 21:06	50
Bromodichloromethane	ND		250		ug/Kg			10/09/25 21:06	50
Bromoform	ND		500		ug/Kg			10/09/25 21:06	50

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-711693/6
Matrix: Solid
Analysis Batch: 711693

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		250		ug/Kg			10/09/25 21:06	50
Carbon disulfide	ND		250		ug/Kg			10/09/25 21:06	50
Carbon tetrachloride	ND		250		ug/Kg			10/09/25 21:06	50
Chlorobenzene	ND		250		ug/Kg			10/09/25 21:06	50
Chloroethane	ND		250		ug/Kg			10/09/25 21:06	50
Chloroform	ND		250		ug/Kg			10/09/25 21:06	50
Chloromethane	ND		250		ug/Kg			10/09/25 21:06	50
cis-1,3-Dichloropropene	ND		250		ug/Kg			10/09/25 21:06	50
Dibromochloromethane	ND		250		ug/Kg			10/09/25 21:06	50
Ethylbenzene	ND		250		ug/Kg			10/09/25 21:06	50
m-Xylene & p-Xylene	ND		250		ug/Kg			10/09/25 21:06	50
Methylene Chloride	ND		250		ug/Kg			10/09/25 21:06	50
o-Xylene	ND		250		ug/Kg			10/09/25 21:06	50
Styrene	ND		250		ug/Kg			10/09/25 21:06	50
Tetrachloroethene	ND		250		ug/Kg			10/09/25 21:06	50
Toluene	ND		250		ug/Kg			10/09/25 21:06	50
trans-1,2-Dichloroethene	ND		250		ug/Kg			10/09/25 21:06	50
trans-1,3-Dichloropropene	ND		250		ug/Kg			10/09/25 21:06	50
Trichloroethene	ND		250		ug/Kg			10/09/25 21:06	50
Trichlorofluoromethane	ND		250		ug/Kg			10/09/25 21:06	50
Vinyl acetate	ND		500		ug/Kg			10/09/25 21:06	50
Vinyl chloride	ND		250		ug/Kg			10/09/25 21:06	50
Xylenes, Total	ND		250		ug/Kg			10/09/25 21:06	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*54 - 135*		*10/09/25 21:06*	*50*
4-Bromofluorobenzene (Surr)	*89*		*50 - 131*		*10/09/25 21:06*	*50*
Dibromofluoromethane (Surr)	*93*		*50 - 141*		*10/09/25 21:06*	*50*
Toluene-d8 (Surr)	*94*		*52 - 141*		*10/09/25 21:06*	*50*

Lab Sample ID: LCS 410-711693/5
Matrix: Solid
Analysis Batch: 711693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	5000	7210	*+	ug/Kg		144	68 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*54 - 135*
4-Bromofluorobenzene (Surr)	*90*		*50 - 131*
Dibromofluoromethane (Surr)	*95*		*50 - 141*
Toluene-d8 (Surr)	*96*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-711693/8
Matrix: Solid
Analysis Batch: 711693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1000	994		ug/Kg		99	69 - 123
1,1,2,2-Tetrachloroethane	1000	1090		ug/Kg		109	69 - 125
1,1,2-Trichloroethane	1000	1030		ug/Kg		103	76 - 120
1,1-Dichloroethane	1000	1010		ug/Kg		101	66 - 120
1,1-Dichloroethene	1000	1010		ug/Kg		101	73 - 129
1,2-Dichlorobenzene	1000	893		ug/Kg		89	74 - 120
1,2-Dichloroethane	1000	1030		ug/Kg		103	72 - 124
1,2-Dichloropropane	1000	984		ug/Kg		98	70 - 124
1,3-Dichlorobenzene	1000	920		ug/Kg		92	75 - 120
1,4-Dichlorobenzene	1000	919		ug/Kg		92	76 - 122
Methyl Ethyl Ketone	12500	12200		ug/Kg		98	48 - 142
2-Chloroethyl vinyl ether	1000	996		ug/Kg		100	68 - 120
2-Hexanone	12500	12500		ug/Kg		100	54 - 140
methyl isobutyl ketone	12500	12500		ug/Kg		100	67 - 138
Acetone	12500	10200		ug/Kg		81	28 - 169
Benzene	1000	994		ug/Kg		99	80 - 120
Bromodichloromethane	1000	1050		ug/Kg		105	70 - 120
Bromoform	1000	943		ug/Kg		94	66 - 127
Bromomethane	1000	1400	*+	ug/Kg		140	60 - 120
Carbon disulfide	1000	855		ug/Kg		86	64 - 133
Carbon tetrachloride	1000	1040		ug/Kg		104	64 - 120
Chlorobenzene	1000	1000		ug/Kg		100	74 - 120
Chloroethane	1000	1350	*+	ug/Kg		135	55 - 127
Chloroform	1000	1030		ug/Kg		103	73 - 120
Chloromethane	1000	747		ug/Kg		75	43 - 120
cis-1,3-Dichloropropene	1000	972		ug/Kg		97	66 - 120
Dibromochloromethane	1000	1050		ug/Kg		106	69 - 125
Ethylbenzene	1000	981		ug/Kg		98	72 - 118
m-Xylene & p-Xylene	2000	1930		ug/Kg		97	80 - 120
Methylene Chloride	1000	1020		ug/Kg		102	76 - 122
o-Xylene	1000	941		ug/Kg		94	75 - 120
Styrene	1000	966		ug/Kg		97	76 - 120
Tetrachloroethene	1000	988		ug/Kg		99	73 - 120
Toluene	1000	1000		ug/Kg		100	71 - 120
trans-1,2-Dichloroethene	1000	1020		ug/Kg		102	71 - 126
trans-1,3-Dichloropropene	1000	1020		ug/Kg		102	68 - 122
Trichloroethene	1000	944		ug/Kg		94	72 - 120
Trichlorofluoromethane	1000	753		ug/Kg		75	49 - 120
Vinyl chloride	1000	826		ug/Kg		83	52 - 120
Xylenes, Total	3000	2870		ug/Kg		96	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*54 - 135*
4-Bromofluorobenzene (Surr)	*92*		*50 - 131*
Dibromofluoromethane (Surr)	*92*		*50 - 141*
Toluene-d8 (Surr)	*94*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-711693/10
Matrix: Solid
Analysis Batch: 711693

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	976		ug/Kg		98	89 - 123	2	30
1,1,2,2-Tetrachloroethane	1000	1080		ug/Kg		108	69 - 125	1	30
1,1,2-Trichloroethane	1000	1010		ug/Kg		101	76 - 120	3	30
1,1-Dichloroethane	1000	992		ug/Kg		99	88 - 120	1	30
1,1-Dichloroethene	1000	1010		ug/Kg		101	73 - 129	0	30
1,2-Dichlorobenzene	1000	873		ug/Kg		87	74 - 120	2	30
1,2-Dichloroethane	1000	992		ug/Kg		99	72 - 124	3	30
1,2-Dichloropropane	1000	981		ug/Kg		96	70 - 124	2	30
1,3-Dichlorobenzene	1000	892		ug/Kg		89	75 - 120	3	30
1,4-Dichlorobenzene	1000	911		ug/Kg		91	76 - 122	1	30
Methyl Ethyl Ketone	12500	12000		ug/Kg		96	48 - 142	2	30
2-Chloroethyl vinyl ether	1000	977		ug/Kg		98	68 - 120	2	30
2-Hexanone	12500	12600		ug/Kg		101	54 - 140	1	30
methyl isobutyl ketone	12500	12500		ug/Kg		100	67 - 138	0	30
Acetone	12500	11700		ug/Kg		94	28 - 189	14	30
Benzene	1000	979		ug/Kg		98	80 - 120	2	30
Bromodichloromethane	1000	1040		ug/Kg		104	70 - 120	1	30
Bromoform	1000	928		ug/Kg		93	66 - 127	2	30
Bromomethane	1000	1390	*+	ug/Kg		139	60 - 120	1	30
Carbon disulfide	1000	831		ug/Kg		83	64 - 133	3	30
Carbon tetrachloride	1000	1010		ug/Kg		101	64 - 120	3	30
Chlorobenzene	1000	981		ug/Kg		98	74 - 120	2	30
Chloroethane	1000	1350	*+	ug/Kg		135	55 - 127	0	30
Chloroform	1000	1010		ug/Kg		101	73 - 120	2	30
Chloromethane	1000	750		ug/Kg		75	43 - 120	0	30
cis-1,3-Dichloropropene	1000	948		ug/Kg		95	66 - 120	3	30
Dibromochloromethane	1000	1040		ug/Kg		104	69 - 125	2	30
Ethylbenzene	1000	962		ug/Kg		96	72 - 118	2	30
m-Xylene & p-Xylene	2000	1920		ug/Kg		96	80 - 120	1	30
Methylene Chloride	1000	998		ug/Kg		100	76 - 122	2	30
o-Xylene	1000	920		ug/Kg		92	75 - 120	2	30
Styrene	1000	957		ug/Kg		96	76 - 120	1	30
Tetrachloroethene	1000	947		ug/Kg		95	73 - 120	4	30
Toluene	1000	1000		ug/Kg		100	71 - 120	0	30
trans-1,2-Dichloroethene	1000	1000		ug/Kg		100	71 - 126	2	30
trans-1,3-Dichloropropene	1000	993		ug/Kg		99	68 - 122	2	30
Trichloroethene	1000	932		ug/Kg		93	72 - 120	1	30
Trichlorofluoromethane	1000	743		ug/Kg		74	49 - 120	1	30
Vinyl chloride	1000	805		ug/Kg		81	52 - 120	3	30
Xylenes, Total	3000	2840		ug/Kg		95	75 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*54 - 135*
4-Bromofluorobenzene (Surr)	*91*		*50 - 131*
Dibromofluoromethane (Surr)	*90*		*50 - 141*
Toluene-d8 (Surr)	*93*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-711693/7
Matrix: Solid
Analysis Batch: 711693

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	5000	7410	*+	ug/Kg		148	68 - 128	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		54 - 135
4-Bromofluorobenzene (Surr)	91		50 - 131
Dibromofluoromethane (Surr)	93		50 - 141
Toluene-d8 (Surr)	97		52 - 141

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-503967/1-A
Matrix: Solid
Analysis Batch: 503968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 503967

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		8.3		ug/Kg		10/03/25 05:20	10/03/25 12:08	1
PCB-1221	ND		8.3		ug/Kg		10/03/25 05:20	10/03/25 12:08	1
PCB-1232	ND		8.3		ug/Kg		10/03/25 05:20	10/03/25 12:08	1
PCB-1242	ND		8.3		ug/Kg		10/03/25 05:20	10/03/25 12:08	1
PCB-1248	ND		8.3		ug/Kg		10/03/25 05:20	10/03/25 12:08	1
PCB-1254	ND		8.3		ug/Kg		10/03/25 05:20	10/03/25 12:08	1
PCB-1260	ND		8.3		ug/Kg		10/03/25 05:20	10/03/25 12:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene (Surr)	85		17 - 144	10/03/25 05:20	10/03/25 12:08	1
Tetrachloro-m-xylene (Surr)	89		17 - 144	10/03/25 05:20	10/03/25 12:08	1
DCB Decachlorobiphenyl (Surr)	81		26 - 142	10/03/25 05:20	10/03/25 12:08	1
DCB Decachlorobiphenyl (Surr)	77		26 - 142	10/03/25 05:20	10/03/25 12:08	1

Lab Sample ID: LCS 180-503967/2-A
Matrix: Solid
Analysis Batch: 503968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 503967

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	667	636		ug/Kg		95	53 - 115
PCB-1260	667	656		ug/Kg		98	45 - 108

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene (Surr)	88		17 - 144
Tetrachloro-m-xylene (Surr)	96		17 - 144
DCB Decachlorobiphenyl (Surr)	85		26 - 142
DCB Decachlorobiphenyl (Surr)	106		26 - 142

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 180-196601-A-1-A MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 503968 — **Prep Batch: 503967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	ND		1480	1440		ug/Kg	☼	97	53 - 115
PCB-1260	ND		1480	1660		ug/Kg	☼	105	45 - 108

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*87*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*94*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*94*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*94*		*26 - 142*

Lab Sample ID: 180-196601-A-1-B MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 503968 — **Prep Batch: 503967**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	ND		1490	1220		ug/Kg	☼	62	53 - 115	16	25
PCB-1260	ND		1490	1350		ug/Kg	☼	90	45 - 108	14	23

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*76*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*80*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*80*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*79*		*26 - 142*

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 410-710531/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 710531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L			10/07/25 20:26	1

Lab Sample ID: LCS 410-710531/2 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 710531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.0	35.1		mg/L		88	78 - 114

Lab Sample ID: LCSD 410-710531/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 710531

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	36.5		mg/L		91	78 - 114	4	13

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Method: 1664B - HEM and SGT-HEM (Continued)

Lab Sample ID: 410-243905-D-1 MS
Matrix: Solid
Analysis Batch: 710531

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	ND	FL	38.5	27.2	FL	mg/L		67	78 - 114

Lab Sample ID: LB 410-709533/1-A
Matrix: Solid
Analysis Batch: 710531

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.2		mg/L			10/07/25 20:26	1

Method: 9071B - HEM and SGT-HEM

Lab Sample ID: MB 410-709276/1-A
Matrix: Solid
Analysis Batch: 710502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 709276

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		600		mg/Kg		10/05/25 10:25	10/07/25 18:42	1

Lab Sample ID: LCS 410-709276/2-A
Matrix: Solid
Analysis Batch: 710502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 709276

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	4980	5200		mg/Kg		105	89 - 113

Lab Sample ID: 180-196393-C-2-D MS
Matrix: Solid
Analysis Batch: 710502

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 709276

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	ND	FL	5240	2730	FL	mg/Kg	☼	52	89 - 113

Lab Sample ID: 180-196393-C-2-E MSD
Matrix: Solid
Analysis Batch: 710502

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 709276

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	ND	FL	5180	2660	FL	mg/Kg	☼	51	89 - 113	3	26

Lab Sample ID: 180-196393-C-2-C DU
Matrix: Solid
Analysis Batch: 710502

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 709276

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
HEM (Oil & Grease)	ND	FL	ND		mg/Kg	☼	NC	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

Method: EPA 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 180-504049/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504085 — **Prep Batch: 504049**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.19		mg/Kg		10/06/25 08:05	10/06/25 12:43	1

Lab Sample ID: LCS 180-504049/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504085 — **Prep Batch: 504049**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	4.00	3.93		mg/Kg		98	90 - 110

Lab Sample ID: 180-196601-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504085 — **Prep Batch: 504049**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	ND		4.69	4.41		mg/Kg	☼	94	90 - 110

Lab Sample ID: 180-196601-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 504085 — **Prep Batch: 504049**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenolics, Total Recoverable	ND		4.33	4.37		mg/Kg	☼	101	90 - 110	1	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-196585-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 503953

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	33		31.5		%		5	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

GC/MS VOA

Prep Batch: 709494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-3	251001010-03	Total/NA	Solid	5035	
180-196587-3 - RA	251001010-03	Total/NA	Solid	5035	

Analysis Batch: 710677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-3	251001010-03	Total/NA	Solid	8260D	709494
MB 410-710677/10	Method Blank	Total/NA	Solid	8260D	
LCS 410-710677/5	Lab Control Sample	Total/NA	Solid	8260D	
LCS 410-710677/7	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-710677/8	Lab Control Sample Dup	Total/NA	Solid	8260D	
LCSD 410-710677/8	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 711693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-3 - RA	251001010-03	Total/NA	Solid	8260D	709494
MB 410-711693/6	Method Blank	Total/NA	Solid	8260D	
LCS 410-711693/5	Lab Control Sample	Total/NA	Solid	8260D	
LCS 410-711693/8	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-711693/10	Lab Control Sample Dup	Total/NA	Solid	8260D	
LCSD 410-711693/7	Lab Control Sample Dup	Total/NA	Solid	8260D	

GC Semi VOA

Prep Batch: 503967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-1	251001010-01	Total/NA	Solid	3541	
MB 180-503967/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-503967/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-196601-A-1-A MS	Matrix Spike	Total/NA	Solid	3541	
180-196601-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 503968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-1	251001010-01	Total/NA	Solid	EPA 8082A	503967
MB 180-503967/1-A	Method Blank	Total/NA	Solid	EPA 8082A	503967
LCS 180-503967/2-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	503967
180-196601-A-1-A MS	Matrix Spike	Total/NA	Solid	EPA 8082A	503967
180-196601-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8082A	503967

General Chemistry

Analysis Batch: 503953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-1	251001010-01	Total/NA	Solid	SM 2540G	
180-196587-2	251001010-02	Total/NA	Solid	SM 2540G	
180-196587-3	251001010-03	Total/NA	Solid	SM 2540G	
180-196585-A-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

Prep Batch: 504049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-1	251001010-01	Total/NA	Solid	Distill/Phenol	
MB 180-504049/1-A	Method Blank	Total/NA	Solid	Distill/Phenol	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quaterly Limed Sludge

Job ID: 180-196587-1
SDG: 251001010

General Chemistry (Continued)

Prep Batch: 504049 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-504049/2-A	Lab Control Sample	Total/NA	Solid	Distill/Phenol	
180-196601-A-1-E MS	Matrix Spike	Total/NA	Solid	Distill/Phenol	
180-196601-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	Distill/Phenol	

Analysis Batch: 504085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-196587-1	251001010-01	Total/NA	Solid	EPA 9065	504049
MB 180-504049/1-A	Method Blank	Total/NA	Solid	EPA 9065	504049
LCS 180-504049/2-A	Lab Control Sample	Total/NA	Solid	EPA 9065	504049
180-196601-A-1-E MS	Matrix Spike	Total/NA	Solid	EPA 9065	504049
180-196601-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9065	504049

Prep Batch: 709276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-2	251001010-02	Total/NA	Solid	9071B	
MB 410-709276/1-A	Method Blank	Total/NA	Solid	9071B	
LCS 410-709276/2-A	Lab Control Sample	Total/NA	Solid	9071B	
180-196393-C-2-D MS	Matrix Spike	Total/NA	Solid	9071B	
180-196393-C-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	9071B	
180-196393-C-2-C DU	Duplicate	Total/NA	Solid	9071B	

Leach Batch: 709533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-2	251001010-02	ASTM Leach	Solid	D3987-85	
LB 410-709533/1-A	Method Blank	ASTM Leach	Solid	D3967-85	

Analysis Batch: 710502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-2	251001010-02	Total/NA	Solid	9071B	709276
MB 410-709276/1-A	Method Blank	Total/NA	Solid	9071B	709276
LCS 410-709276/2-A	Lab Control Sample	Total/NA	Solid	9071B	709276
180-196393-C-2-D MS	Matrix Spike	Total/NA	Solid	9071B	709276
180-196393-C-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	9071B	709276
180-196393-C-2-C DU	Duplicate	Total/NA	Solid	9071B	709276

Analysis Batch: 710531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-196587-2	251001010-02	ASTM Leach	Solid	1664B	709533
LB 410-709533/1-A	Method Blank	ASTM Leach	Solid	1664B	709533
MB 410-710531/1	Method Blank	Total/NA	Solid	1664B	
LCS 410-710531/2	Lab Control Sample	Total/NA	Solid	1684B	
LCSD 410-710531/3	Lab Control Sample Dup	Total/NA	Solid	1664B	
410-243905-D-1 MS	Matrix Spike	Total/NA	Solid	1664B	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **251001010**

Additional Information : Quarterly Limed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: See attached Parameter List	HEM, ASTM HEM, % total solids	VOA EPA 8260D *	Total Solids		
251001010-01	10/1/25	0605	S	N	G	Always maintain sample/extract at	1					
251001010-02	10/1/25	0605	S	N	G	25°C when reading any pH result.		1				
251001010-03	10/1/25	0605	S	N*	G	Solids must be analyzed by 2540G.			6	1		
						All methods must be accredited by						
						PADEP or NELAC.						
						Email a copy of LIMS login with signed						
						COC as soon as possible after receipt.						
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-196587 Chain of Custody

Number of Containers

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	10 01 25	1257	[signature]	Eurofins Pgh	10-1-25	1251
[signature]	EPITNE	10-1-25	1330	[signature]	EPITNE	10/1/25	1330

COC Analyst Cooler Review: Initials: [initials] Date: 10/1/25

Supervisor Review: Initials: [initials] Date: 10-1-25

alcosan

Environmental Compliance Laboratory

Contract Lab GRAB portion of Quarterly Analysis when shared with ALCOSAN Lab

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM & LIMED SLUDGE- QUARTERLY			
Check reporting limit requirements.	Quarterly	AMBER GRAB (1 Amber quart) PCBs 2 3 7 8-TCDD* Phenolics * Solids Total (SM2540G)* HEM GRAB (1 clear pint) Oil & Grease * Solids, Total (SM2540G)* ASTM Oil & Grease * VOA GRAB (1 vial + 1 jar for TS) 8260 Volatile Organics * Solids Total (SM2540G)* * Analyses done on a separate grab sample for each matrix.	Laboratory

Red indicates analyses performed by a contract laboratory

SEND 1 CLEAR PINT GRAB FOR HEM, 1 AMBER QUART GRAB FOR EACH LOCATION, AND 1 VOA VIAL GRAB WITH 1 JAR FOR TS)

ALLOSAN Laboratory - VOA Solid Matrix Prep Log (SW846-8260)

Sample Name	LIMS ID	Vial #	Chemical Type (MEOH/ Sodium Bisulfate)	Control No.	Sample Weight (grams)	Date Prepared	Prep/Collection Analyst Initials:
LIMED GRAB LL5	250722014-01	916	Sodium Bisulf	63025A	5.13	7-21-25	TAKAC
LL5	JAR Collection 11:02 AM	917			5.23	1:18	
LL1		918			1.02		
LL1		919			1.08		
HL5		920	MeOH	205255B	5.05		
HL5		921			5.11		
FULL		922	NA	NA	NA		
FULL		923					
ASH GRAB LL5	251001011-03	100	Sodium Bisulfate	63025A	5.03	10-1-25	TAKAC
LL5	JAR Collection 7:05 AM	101			5.13	8:00	
LL1		102			1.04		
LL1		103			1.10		
HL5		104	MeOH	32625A	5.00		
HL5		105			5.00		
FULL		106	NA	NA	NA		
FULL		107					
				MK 10-1-25			

ALCOSAN Laboratory - VOA Solid Matrix Prep Log (SW846-8260)

Sample Name	LIMS ID	Vial #	Chemical Type (MEOH/ Sodium Bisulfate)	Control No.	Sample Weight (grams)	Date Prepared	Prep/Collection Analyst Initials:
Grit Grab LL5	251001012-03	108	~~Sodium Bif~~ Bisulf.	63025A	5.29	10-1-25 8:15	TAKAC
LL5	JAR Collection 7:10 Am	109			5.00		
LL1		110			1.06		
LL1		111			1.00		
HL5		112	MeOH	32625A	5.11		
HL5		113			5.15		
Full		114	NA	NA	NA		
Full		115					
Scum Grab LL5	251001013-03	116	Sodium Bisulf	63025A	5.03	10-1-25 8:30	TAKAC
LL5	JAR collection 7:55 Am	117			5.27		
LL1		118			1.02		
LL1		119			1.01		
HL5		120	MeOH	32625A	5.46		
HL5		121			5.51		
Full		122	NA	NA	NA		
Full		123					
				WC 10-1-25			

Sample Name	LIMS ID	Vial #	Chemical Type (MEOH/ Sodium Bisulfate)	Control No.	Sample Weight (grams)	Date Prepared	Prep/Collection Analyst Initials:
LINED CAKE GRAB LLS	25100 1010-03	124	Sodium Bisulf	63025A	5.06	10-1-25 8:55	TAKAC
LLS	JAR Collection 6:05 am	125			5.08		
LLI		126			1.04		
LLI		127			1.02		
HLS		128	MeOH	32625A	5.07		
HLS		129			5.07		
FULL		130	NA	NA	NA		
FULL		131					

JM #25

CF+0.1

J3	0.9	1.0
J4	1.8	1.9

180-196587 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-545292.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-196587-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 10/9/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quaterly Limed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8290A/HRMS_Sxthm_P2,3,7,8-TCDD	1664B_NP/ABTM_LEACH_NP/HEM Only	8270D/8270E_P_Sox(MOD)HEM (Oil and Grease) mg/kg dw	8260D/5035FP_CalcAlcosan Volatile List	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
251001010-01 (180-196587-1)	10/1/25	06:05 Eastern	G	Solid			X				1	
251001010-02 (180-196587-2)	10/1/25	06:05 Eastern	G	Solid				X	X		1	
251001010-03 (180-196587-3)	10/1/25	06:05 Eastern	G	Solid						X	8	MUST be analyzed in HOLDtime

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:	
Relinquished by:	Date/Time: 10/3/25 1330	Company:	Received by: MA	Date/Time: 10.3.25 1400	Company: EIE
Relinquished by: MA	Date/Time: 10.3.25 1830	Company: EIE	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 10/3/25 1830	Company:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 6.3.1 6.3.2		

Ver: 10/10/2024

10/17/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-196587-1
SDG Number: 251001010

Login Number: 196587
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's neme present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-196587-1
SDG Number: 251001010

Login Number: 196587
List Number: 2
Creator: McDonald, Telgan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 10/03/25 10:41 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

APPENDIX B TO SCOPE OF SERVICES

UNLIMED SOLIDS ANNUAL TESTING RESULTS – 2025

[See Attached]

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250707017 **Sample Date:** 7/7/2025

Sample ID Number: 250707017-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
COD	Contract Lab	EurofinsLancaster	7/17/2025	1800	mg/L	380		
Cyanide, Total	Contract Lab	EurofinsPittsburgh	7/18/2025	28	ug/L	10		
Ammonia-Nitrogen	Contract Lab	EurofinsPittsburgh	7/14/2025	85	mg/L	10		
Nitrate, as Nitrogen	Contract Lab	EurofinsPittsburgh	7/12/2025	0.22	mg/L	0.10		
pH	Contract Lab	EurofinsPittsburgh	7/11/2025	6.92	SU	0.1		
ASTM pH Temperature	Contract Lab	EurofinsPittsburgh	7/11/2025	25.6	°C	0.1	!	Laboratory is not accredited for this parameter. See attached report.
Sulfates	Contract Lab	EurofinsPittsburgh	7/12/2025	5.1	mg/L	1.0		
Total Solids	Contract Lab	EurofinsPittsburgh	7/14/2025	900	mg/L	20		
Total Volatile Solids	Contract Lab	EurofinsPittsburgh	7/14/2025	740	mg/L	20	!	Laboratory is not accredited for this parameter. See attached report.
Chemistry								
Cyanide, Total	Contract Lab	EurofinsPittsburgh	7/12/2025	3.6	mg/kg dry	0.98		
Contract Lab								
Ignitability	Contract Lab	EurofinsLancaster	7/18/2025	>200	°F	50		
Chlordane	Contract Lab	EurofinsPittsburgh	7/12/2025	490	ug/Kg Dry	53		

Printed Date
Friday, August 15, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250707017 **Sample Date:** 7/7/2025

Sample ID Number: 250707017-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Herbicides	Contract Lab	EurofinsPittsburgh	7/15/2025	See attached report	ug/Kg Dry			
Paint Filter Test	Contract Lab	EurofinsPittsburgh	7/10/2025	CNF		0.10		Contains No Free Liquid
Reactive Cyanide	Contract Lab	EurofinsLancaster	7/22/2025	<94	mg/kg	94		
Reactive Sulfide	Contract Lab	EurofinsLancaster	7/22/2025	<170	mg/kg	170		
Total Sulfide	Contract Lab	EurofinsCleveland	7/14/2025	130	mg/kg dry	93		
Toxaphene	Contract Lab	EurofinsPittsburgh	7/12/2025	<210	ug/Kg Dry	210		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/10/2025	32	%	0.50		
Percent Volatile Solids	Contract Lab	EurofinsPittsburgh	7/10/2025	54	%	0.50		
Daily 2								
pH	SW846 9045D	bbatson	7/7/2025	6.14	s.u.			
Extractable Organics								
8270 BNA	Contract Lab	EurofinsPittsburgh	7/11/2025	See attached Report	ug/Kg Dry			
Pesticides	Contract Lab	EurofinsPittsburgh	7/12/2025	See attached report	ug/Kg Dry			
TCLP								
Boron	Contract Lab	EurofinsLancaster	7/17/2025	<0.50	mg/L	0.50		
Herbicides	Contract Lab	EurofinsPittsburgh	7/15/2025	See attached report	mg/L			

Printed Date
Friday, August 15, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250707017 **Sample Date:** 7/7/2025

Sample ID Number: 250707017-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
608 Pesticides	Contract Lab	EurofinsPittsburgh	7/14/2025	See Attached	mg/L			
TCLP BNA	Contract Lab	EurofinsPittsburgh	7/14/2025	See attached report	mg/L			
TCLP Volatile Organics	Contract Lab	EurofinsLancaster	7/21/2025	See Attached	mg/L			
Aluminum	Contract Lab	EurofinsLancaster	7/17/2025	<0.25	mg/L	0.25		
Chloradane	Contract Lab	EurofinsPittsburgh	7/14/2025	<0.0050	mg/L	0.0050		
Arsenic	Contract Lab	EurofinsLancaster	7/17/2025	<0.020	mg/L	0.020		
Barium	Contract Lab	EurofinsLancaster	7/17/2025	0.19	mg/L	0.020		
Cadmium	Contract Lab	EurofinsLancaster	7/17/2025	<0.0050	mg/L	0.0050		
Chromium	Contract Lab	EurofinsLancaster	7/17/2025	<0.020	mg/L	0.020		
Copper	Contract Lab	EurofinsLancaster	7/17/2025	0.028	mg/L	0.010		
Silver	Contract Lab	EurofinsLancaster	7/17/2025	<0.0050	mg/L	0.0050	B	Analyte was found in the blank.
Toxaphene	Contract Lab	EurofinsPittsburgh	7/14/2025	<0.040	mg/L	0.040		
Molybdenum	Contract Lab	EurofinsLancaster	7/17/2025	0.0081	mg/L	0.0050		
Nickel	Contract Lab	EurofinsLancaster	7/17/2025	0.090	mg/L	0.010		
Lead	Contract Lab	EurofinsLancaster	7/17/2025	<0.0050	mg/L	0.0050		
Antimony	Contract Lab	EurofinsLancaster	7/17/2025	<0.010	mg/L	0.010		

Printed Date
Friday, August 15, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250707017 **Sample Date:** 7/7/2025

Sample ID Number: 250707017-07 **Sample Type:** COMPOSITE

Customer Sample Number: COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Selenium	Contract Lab	EurofinsLancaster	7/17/2025	<0.010	mg/L	0.010		
Zinc	Contract Lab	EurofinsLancaster	7/17/2025	1.3	mg/L	0.10		
Mercury	Contract Lab	EurofinsLancaster	7/17/2025	<0.0020	mg/L	0.0020		

Data Qualifier	Data Qualifier Description
B	Similar concentration found in field/method blank

Comments:

Sample composited on July 7 from grabs collected on July 1, July 2, July 3, July 4, July 6, July 7.

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037
EurofinsCleveland	PADEP 68-00340

"ALCOSAN Laboratory reported SW846 9045D pH results are corrected to 25 deg. C using a temperature correction calculation"

Released by: Larissa Hart

8-15-25

Date

Printed Date
Friday, August 15, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 7/23/2025 7:57:43 PM

JOB DESCRIPTION

Quarterly Unlimed Sludge
250707017

JOB NUMBER

180-192857-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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7/23/2025 7:57:43 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 6
Certification Summary 8
Sample Summary 9
Method Summary 10
Lab Chronicle 11
Client Sample Results 14
QC Sample Results 19
QC Association Summary 45
Chain of Custody 52
Receipt Checklists 61

Job Narrative
180-192857-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 7/8/2025 5:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5°C and 1.7°C.

Comments
The following is the pH to an additionel decimal place for 9040C/ASTM: 6.92
The following test was analyzed on a water following ASTM Leach of the sludge. The lab is certified for this method in Non-Potable Water - SM2540E

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Method 8260D - TCLP: The continuing calibration verification (CCV) associated with batch 410-673750 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene and 2-Butanone (MEK). A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) analyzed in 180-499353 was outside the method criteria for the following analyte(s): Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate, Di-n-octyl phthalate and 2-Nitroaniline. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 180-499353 recovered outside acceptance criteria, low biased, for Isophorone. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Herbicides
Method 8151A: The continuing calibration verification (CCV) associated with 180-499528 recovered high and outside the control limits for 2,4,5-T on one column. Results are confirmed on both columns and either ND or reported from the passing column. The associated samples are: (CCV 180-499526/23) and (CCV 180-499528/34).

Method 8151A - TCLP: Surrogate recovery for the following samples were outside the upper control limit: (LCS 180-499420/2-A) and (LCSD 180-499420/3-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8151A - TCLP: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 160-499420 and analytical batch 180-499528 recovered outside control limits for the following analytes: 2,4-D and Silvex. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Pittsburgh

Pesticides
Method 8081B: PEM is used for breakdown only. (PEM 180-499378/27)

Method 8081B: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follow: LCS failed for endrin aldehyde but passed in the LCSD. Results reported as is.

Method 8081B - TCLP: PEM is used for breakdown only. (PEM 180-499458/27)

Method 8081B - TCLP: The continuing calibration verification (CCV) associated with 180-499458 recovered high and outside the control limits for endrin on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated samples are: (CCVIS 180-499458/32) and (CCVIS 180-499458/6).

Method 8081B - TCLP: The continuing calibration verification (CCV) associated with 180-499458 recovered high and outside the control limits for mirex on one column. Results are confirmed on both columns and hits were reported from the passing column. The associated sample is: (CCV 180-499458/30).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Metals
Method 7470A - TCLP: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: 250707017-07 (180-192857-1). The reporting limits (RLs) have been adjusted proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 1010B: The Pensky Martens closed cup apparatus is designed to determine the flash point of a liquid sample. The sample submitted could not be mixed well enough to obtain uniform heating. The temperature being measured was that of the material near the top of the cup. The material at the bottom of the cup could have a higher temperature. The temperature reported may not be accurate.

Method 350.1 - ASTM Leach: The following sample was diluted to bring the concentration of target analytes within the calibration range: 250707017-07 (180-192857-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
FL	MS and/or MSD recovery below control limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
FH	MS and/or MSD recovery above control limits.
FL	MS and/or MSD recovery below control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^c	CCV Recovery is outside acceptance limits.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
B	Analyte was found in the blank.
F2	MS/MSD RPD exceeds control limits
FL	MS and/or MSD recovery below control limits.

General Chemistry

Qualifier	Qualifier Description
I	Laboratory is not accredited for this paremeter.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the reletive difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Laboratory: Eurofins Pittsburgh

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
EPA 9040C		Solid	Temperature
SM 2540E		Solid	Total Volatile Solids

Laboratory: Eurofins Cleveland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	68-00340	08-31-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-192857-1	250707017-07	Solid	07/07/25 06:04	07/08/25 17:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
EPA 8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PIT
EPA 8081B	Organochlorine Pesticides (GC)	SW846	EET PIT
EPA 8151A	Herbicides (GC)	SW846	EET PIT
EPA 9056A	Anions, Ion Chromatography	SW846	EET PIT
6010D	Metals (ICP)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
1010B	Ignitability, Pensky-Martens Closed-Cup Method	SW846	ELLE
350.1_GD	Ammonia by Gas Diffusion	EPA	EET PIT
410.4	COD	EPA	ELLE
9012	Cyanide, Reactive	SW846	ELLE
9034	Sulfide, Acid soluble and Insoluble (Titrimetric)	SW846	EET CLE
9034	Sulfide, Reactive	SW846	ELLE
EPA 9014	Cyanide	SW846	EET PIT
EPA 9040C	pH	SW846	EET PIT
EPA 9095B	Paint Filter	SW846	EET PIT
SM 2540B	Total Solids	SM	EET PIT
SM 2540E	Solids, Volatile and Fixed (VS)	SM	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
1311	TCLP Extraction	SW846	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
5030C	Purge and Trap	SW846	ELLE
7.3.3	Cyanide, Reactive	SW846	ELLE
7.3.4	Sulfide, Reactive	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8151A	Extraction (Herbicides)	SW846	EET PIT
9010C	Cyanide, Distillation	SW846	EET PIT
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	EET CLE
D3987-85	ASTM Leaching Procedure	ASTM	EET PIT
D3987-85	ASTM Leaching Procedure	ASTM	ELLE
EPA 1311	TCLP Extraction	SW846	EET PIT

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Client Sample ID: 250707017-07
Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Lab Sample ID: 180-192857-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			25.0 g	140 mL	672618	07/17/25 14:06	UNWS	ELLE
TCLP	Analysis	8260D		20	5 mL	5 mL	673750	07/21/25 14:16	TQ4J	ELLE
	Instrument ID: 26285									
TCLP	Leach	EPA 1311			100.31 g	2000 mL	499274	07/10/25 08:17	Z1M	EET PIT
TCLP	Prep	3510C			200 mL	10.0 mL	499422	07/11/25 22:09	VJC	EET PIT
TCLP	Analysis	EPA 8270E		1	1 mL	1 mL	499453	07/14/25 12:42	VVP	EET PIT
	Instrument ID: CH751									
TCLP	Leach	EPA 1311			100.31 g	2000 mL	499274	07/10/25 08:17	Z1M	EET PIT
TCLP	Prep	3510C			100 mL	40.0 mL	499421	07/11/25 22:06	VJC	EET PIT
TCLP	Analysis	EPA 8081B		1			499458	07/14/25 22:18	JMO	EET PIT
	Instrument ID: CHGC15									
TCLP	Leach	EPA 1311			100.31 g	2000 mL	499274	07/10/25 08:17	Z1M	EET PIT
TCLP	Prep	8151A			100 mL	10.0 mL	499420	07/11/25 22:01	VJC	EET PIT
TCLP	Analysis	EPA 8151A		20	1 mL	1 mL	499528	07/15/25 09:38	SJM	EET PIT
	Instrument ID: CGC1									
ASTM Leach	Leach	D3987-85			100.05 g	2000 mL	499275	07/10/25 08:19	Z1M	EET PIT
ASTM Leach	Analysis	EPA 9056A		1	1 mL	1 mL	499414	07/12/25 17:38	RSK	EET PIT
	Instrument ID: INTEGRION									
TCLP	Leach	1311			100.55 g	2000 mL	871376	07/15/25 15:30	UNWS	ELLE
TCLP	Prep	3005A			5 mL	50 mL	672350	07/16/25 22:00	UAMX	ELLE
TCLP	Analysis	6010D		1			872711	07/17/25 10:27	MT26	ELLE
	Instrument ID: T74 - 23745									
TCLP	Leach	1311			100.55 g	2000 mL	671376	07/15/25 15:30	UNWS	ELLE
TCLP	Prep	3005A			5 mL	50 mL	672350	07/16/25 22:00	UAMX	ELLE
TCLP	Analysis	6020B		1			672976	07/17/25 18:23	LHF4	ELLE
	Instrument ID: E08 - 30647									
TCLP	Leach	1311			100.55 g	2000 mL	671376	07/15/25 15:30	UNWS	ELLE
TCLP	Prep	7470A			2 mL	20 mL	672352	07/16/25 23:45	UAMX	ELLE
TCLP	Analysis	7470A		1			672933	07/17/25 18:00	IJ3I	ELLE
	Instrument ID: M10 -- 31820									
Total/NA	Analysis	1010B		1	75 g	75 g	672981	07/18/25 01:58	USAE	ELLE
	Instrument ID: NOEQUIP						Completed:	07/18/25 01:58 [1]		
ASTM Leach	Leach	D3987-85			100.05 g	2000 mL	499275	07/10/25 08:19	Z1M	EET PIT
ASTM Leach	Analysis	350.1_GD		100			499510	07/14/25 12:03	SNR	EET PIT
	Instrument ID: BLUE-ASTORIA									
ASTM Leach	Leach	D3987-85			70.52 g	1400 mL	671378	07/15/25 15:30	UNWS	ELLE
ASTM Leach	Analysis	410.4		5	2 mL	2 mL	672558	07/17/25 09:39	USAE	ELLE
	Instrument ID: 11076H									
Total/NA	Prep	7.3.4			9.61 g	500 mL	674345	07/22/25 07:07	DZ3W	ELLE
Total/NA	Analysis	9012		1			675055	07/22/25 19:04	P684	ELLE
	Instrument ID: S0027									
Total/NA	Prep	7.3.4			9.61 g	500 mL	674345	07/22/25 07:07	DZ3W	ELLE
Total/NA	Analysis	9034		1	200 mL	200 mL	674538	07/22/25 10:47	DZ3W	ELLE
	Instrument ID: NOEQUIP									

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Client Sample ID: 250707017-07

Lab Sample ID: 180-192857-1

Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			100.05 g	2000 mL	499275	07/10/25 08:19	Z1M	EET PIT
ASTM Leach	Prep	9010C			10 mL	10 mL	499811	07/18/25 11:51	RAO	EET PIT
ASTM Leach	Analysis	EPA 9014		1			499854	07/18/25 18:21	RAO	EET PIT
	Instrument ID: JAWS									
ASTM Leach	Leach	D3987-85			100.05 g	2000 mL	499275	07/10/25 08:19	Z1M	EET PIT
ASTM Leach	Analysis	EPA 9040C		1			499412	07/11/25 17:28	RAO	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	EPA 9095B		1			499326	07/10/25 15:52	ELS	EET PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			100.05 g	2000 mL	499275	07/10/25 08:19	Z1M	EET PIT
ASTM Leach	Analysis	SM 2540B		1	50 mL	100 mL	499497	07/14/25 13:32	SNR	EET PIT
	Instrument ID: NOEQUIP									
ASTM Leach	Leach	D3987-85			100.05 g	2000 mL	499275	07/10/25 08:19	Z1M	EET PIT
ASTM Leach	Analysis	SM 2540E		1	50 mL	100 mL	499549	07/14/25 13:32	SNR	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540G		1			499291	07/10/25 11:11	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250707017-07

Lab Sample ID: 180-192857-1

Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Matrix: Solid
Percent Solids: 32.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.0 g	5.0 mL	499325	07/10/25 16:16	DVC	EET PIT
Total/NA	Analysis	EPA 8270E		10	1 mL	1 mL	499353	07/11/25 16:00	VVP	EET PIT
	Instrument ID: CH751									
Total/NA	Prep	3541			15.1 g	20.0 mL	499261	07/10/25 05:42	MKK	EET PIT
Total/NA	Analysis	EPA 8081B		1			499378	07/12/25 01:26	JMO	EET PIT
	Instrument ID: CHGC15									
Total/NA	Prep	8151A			10.2 g	40.0 mL	499439	07/13/25 22:01	VJC	EET PIT
Total/NA	Analysis	EPA 8151A		1	1 mL	1 mL	499528	07/15/25 17:18	SJM	EET PIT
	Instrument ID: CGC1									
Total/NA	Prep	9030B			5.02 g	50 mL	663582	07/14/25 07:33	BLW	EET CLE
Total/NA	Analysis	9034		1			663637	07/14/25 09:56	BLW	EET CLE
	Instrument ID: 40311									
Total/NA	Prep	9010C			0.32 g	10 mL	499395	07/11/25 13:17	RAO	EET PIT
Total/NA	Analysis	EPA 9014		1			499428	07/12/25 09:20	RAO	EET PIT
	Instrument ID: SHAMU									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Analyst References:

Lab: EET CLE
- Batch Type: Prep
  - BLW = Bruce Woodward
- Batch Type: Analysis
  - BLW = Bruce Woodward

Lab: EET PIT
- Batch Type: Leach
  - Z1M = Zee Menakruzz
- Batch Type: Prep
  - DVC = Daniel Capodanno
  - MKK = Mary Kenny
  - RAO = Rachel Oster
  - VJC = Vincent Cervone
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - JMO = John Oravec
  - RAO = Rachel Oster
  - RSK = Robert Kurtz
  - SJM = Shannon Mueller
  - SNR = Sabra Richart
  - VVP = Vincent Piccolino

Lab: ELLE
- Batch Type: Leach
  - UNWS = Nicholas Shroyer
- Batch Type: Prep
  - DZ3W = Shaheed Salahuddin
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - DZ3W = Shaheed Salahuddin
  - IJ3I = Elizabeth Brittingham
  - LHF4 = Diamond Boyer
  - MT26 = Jason Knight
  - P684 = Ashlynn Cornelius
  - TQ4J = Corie Mellinger
  - USAE = Susan Engle

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Client Sample ID: 250707017-07
Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Lab Sample ID: 180-192857-1
Matrix: Solid
Percent Solids: 32.0

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND	^c	0.020		mg/L			07/21/25 14:16	20
1,2-Dichloroethane	ND		0.020		mg/L			07/21/25 14:16	20
2-Butanone (MEK)	**2.3**	**^c**	0.20		mg/L			07/21/25 14:16	20
Benzene	ND		0.020		mg/L			07/21/25 14:16	20
Carbon tetrachloride	ND		0.020		mg/L			07/21/25 14:16	20
Chlorobenzene	ND		0.020		mg/L			07/21/25 14:16	20
Chloroform	ND		0.020		mg/L			07/21/25 14:16	20
Naphthalene	ND		0.10		mg/L			07/21/25 14:16	20
Tetrachloroethene	ND		0.020		mg/L			07/21/25 14:16	20
Trichloroethene	ND		0.020		mg/L			07/21/25 14:16	20
Vinyl chloride	ND		0.020		mg/L			07/21/25 14:16	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*80 - 120*		*07/21/25 14:16*	*20*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*07/21/25 14:16*	*20*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*07/21/25 14:16*	*20*
Toluene-d8 (Surr)	*96*		*80 - 120*		*07/21/25 14:16*	*20*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Acenaphthylene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Acetophenone	ND		21000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Anthracene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Atrazine	ND		21000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Benzaldehyde	ND		21000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Benzo[a]anthracene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Benzo[b]fluoranthene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Benzo[k]fluoranthene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Benzo[g,h,i]perylene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Benzo[a]pyrene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
1,1'-Biphenyl	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Bis(2-chloroethoxy)methane	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Bis(2-chloroethyl)ether	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2,2'-oxybis[1-chloropropane]	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Bis(2-ethylhexyl) phthalate	ND	^c	100000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
4-Bromophenyl phenyl ether	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Butyl benzyl phthalate	ND	^c	52000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Caprolactam	ND		53000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Carbazole	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
4-Chloroaniline	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
4-Chloro-3-methylphenol	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2-Chloronaphthalene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2-Chlorophenol	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
4-Chlorophenyl phenyl ether	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Chrysene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Dibenz(a,h)anthracene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Dibenzofuran	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Di-n-butyl phthalate	ND		100000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
3,3'-Dichlorobenzidine	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Client Sample ID: 250707017-07
Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Lab Sample ID: 180-192857-1
Matrix: Solid
Percent Solids: 32.0

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Diethyl phthalate	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2,4-Dimethylphenol	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Dimethyl phthalate	ND		21000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
4,6-Dinitro-2-methylphenol	ND		53000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2,4-Dinitrophenol	ND		100000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2,4-Dinitrotoluene	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2,6-Dinitrotoluene	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Di-n-octyl phthalate	ND	^c	10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Fluoranthene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Fluorene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Hexachlorobenzene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Hexachlorobutadiene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Hexachlorocyclopentadiene	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Hexachloroethane	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Indeno[1,2,3-cd]pyrene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Isophorone	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2-Methylnaphthalene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2-Methylphenol	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Methylphenol, 3 & 4	**40000**		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Naphthalene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2-Nitroaniline	ND	^c	53000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
3-Nitroaniline	ND		53000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
4-Nitroaniline	ND		53000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Nitrobenzene	ND		21000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2-Nitrophenol	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
4-Nitrophenol	ND		53000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
N-Nitrosodiphenylamine	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
N-Nitrosodi-n-propylamine	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Pentachlorophenol	ND		53000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Phenanthrene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Phenol	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
Pyrene	ND		2100		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2,4,5-Trichlorophenol	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10
2,4,6-Trichlorophenol	ND		10000		ug/Kg	☼	07/10/25 16:16	07/11/25 16:00	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*44 - 106*	*07/10/25 16:16*	*07/11/25 16:00*	*10*
2-Fluorophenol	*71*		*48 - 106*	*07/10/25 16:16*	*07/11/25 16:00*	*10*
2,4,6-Tribromophenol	*65*		*34 - 108*	*07/10/25 16:16*	*07/11/25 16:00*	*10*
Nitrobenzene-d5	*82*		*46 - 105*	*07/10/25 16:16*	*07/11/25 16:00*	*10*
Phenol-d5	*76*		*46 - 105*	*07/10/25 16:16*	*07/11/25 16:00*	*10*
Terphenyl-d14	*81*		*39 - 105*	*07/10/25 16:16*	*07/11/25 16:00*	*10*

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1
2,4-Dinitrotoluene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1
Hexachlorobenzene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1
Hexachlorobutadiene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Client Sample ID: 250707017-07
Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Lab Sample ID: 180-192857-1
Matrix: Solid
Percent Solids: 32.0

Method: SW846 EPA 8270E - Semivolatile Organic Compounds (GC/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1
2-Methylphenol	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1
Methylphenol, 3 & 4	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1
Nitrobenzene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1
Pentachlorophenol	ND		0.25		mg/L		07/11/25 22:09	07/14/25 12:42	1
Pyridine	ND		0.10		mg/L		07/11/25 22:09	07/14/25 12:42	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		07/11/25 22:09	07/14/25 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*10 - 130*	*07/11/25 22:09*	*07/14/26 12:42*	*1*
2-Fluorophenol	*84*		*10 - 130*	*07/11/25 22:09*	*07/14/25 12:42*	*1*
2,4,6-Tribromophenol	*74*		*10 - 130*	*07/11/25 22:09*	*07/14/25 12:42*	*1*
Nitrobenzene-d5	*84*		*10 - 130*	*07/11/25 22:09*	*07/14/25 12:42*	*1*
Phenol-d5	*86*		*10 - 130*	*07/11/25 22:09*	*07/14/26 12:42*	*1*
Terphenyl-d14	*80*		*10 - 130*	*07/11/25 22:09*	*07/14/25 12:42*	*1*

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		6.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
alpha-BHC	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
beta-BHC	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
delta-BHC	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
gamma-BHC (Lindane)	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
cis-Chlordane	**66**		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
trans-Chlordane	**59**		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
4,4'-DDD	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Chlordane (technical)	**490**		53		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
4,4'-DDE	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
4,4'-DDT	**7.6**	**p**	5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Dieldrin	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Endosulfan I	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Endosulfan II	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Endosulfan sulfate	ND	*-	5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Endrin	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Endrin aldehyde	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Endrin ketone	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Heptachlor	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Heptachlor epoxide	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Methoxychlor	ND		5.3		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1
Toxaphene	ND		210		ug/Kg	☼	07/10/25 05:42	07/12/25 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*53 - 124*	*07/10/25 05:42*	*07/12/26 01:26*	*1*
Tetrachloro-m-xylene	*73*		*53 - 124*	*07/10/25 05:42*	*07/12/25 01:26*	*1*
DCB Decachlorobiphenyl (Surr)	*74*		*38 - 142*	*07/10/25 05:42*	*07/12/25 01:26*	*1*
DCB Decachlorobiphenyl (Surr)	*70*		*36 - 142*	*07/10/25 05:42*	*07/12/25 01:26*	*1*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Client Sample ID: 250707017-07
Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Lab Sample ID: 180-192857-1
Matrix: Solid
Percent Solids: 32.0

Method: SW846 EPA 8081B - Organochlorine Pesticides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050		mg/L		07/11/25 22:06	07/14/25 22:18	1
Endrin	ND	^c	0.00050		mg/L		07/11/25 22:06	07/14/25 22:18	1
gamma-BHC (Lindane)	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:18	1
Heptachlor	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:18	1
Heptachlor epoxide	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:18	1
Methoxychlor	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:18	1
Toxaphene	ND		0.040		mg/L		07/11/25 22:06	07/14/25 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*103*		*33 - 120*	*07/11/25 22:06*	*07/14/25 22:18*	*1*
Tetrachloro-m-xylene	*116*		*15 - 141*	*07/11/25 22:06*	*07/14/25 22:18*	*1*

Method: SW846 EPA 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		250		ug/Kg	☼	07/13/25 22:01	07/15/25 17:18	1
2,4,5-T	ND		61		ug/Kg	☼	07/13/25 22:01	07/15/25 17:18	1
Silvex (2,4,5-TP)	ND		61		ug/Kg	☼	07/13/25 22:01	07/15/25 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*96*		*13 - 111*	*07/13/25 22:01*	*07/15/25 17:18*	*1*
2,4-Dichlorophenylacetic acid	*94*		*13 - 111*	*07/13/25 22:01*	*07/15/25 17:18*	*1*

Method: SW846 EPA 8151A - Herbicides (GC) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND	*+	0.040		mg/L		07/11/25 22:01	07/15/25 09:38	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		07/11/25 22:01	07/15/25 09:38	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*85*		*13 - 111*	*07/11/25 22:01*	*07/15/25 09:38*	*20*
2,4-Dichlorophenylacetic acid	*87*		*13 - 111*	*07/11/25 22:01*	*07/15/25 09:38*	*20*

Method: SW846 EPA 9056A - Anions, Ion Chromatography - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**5.1**		1.0		mg/L			07/12/25 17:38	1
Nitrate as N	**0.22**		0.10		mg/L			07/12/25 17:38	1

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		07/16/25 22:00	07/17/25 10:27	1

Method: SW846 6020B - Metals (ICP/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.25		mg/L		07/16/25 22:00	07/17/25 18:23	1
Arsenic	ND		0.020		mg/L		07/16/25 22:00	07/17/25 18:23	1
Barium	**0.19**		0.020		mg/L		07/16/25 22:00	07/17/25 18:23	1
Cadmium	ND		0.0050		mg/L		07/16/25 22:00	07/17/25 18:23	1
Chromium	ND		0.020		mg/L		07/16/25 22:00	07/17/25 18:23	1
Copper	**0.028**		0.010		mg/L		07/16/25 22:00	07/17/25 18:23	1
Silver	ND	B	0.0050		mg/L		07/16/25 22:00	07/17/25 18:23	1
Molybdenum	**0.0081**		0.0050		mg/L		07/16/25 22:00	07/17/25 18:23	1
Nickel	**0.090**		0.010		mg/L		07/16/25 22:00	07/17/25 18:23	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Client Sample ID: 250707017-07
Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Lab Sample ID: 180-192857-1
Matrix: Solid
Percent Solids: 32.0

Method: SW846 6020B - Metals (ICP/MS) - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0050		mg/L		07/16/25 22:00	07/17/25 18:23	1
Antimony	ND		0.010		mg/L		07/16/25 22:00	07/17/25 18:23	1
Selenium	ND		0.010		mg/L		07/16/25 22:00	07/17/25 18:23	1
Zinc	**1.3**		0.10		mg/L		07/16/25 22:00	07/17/25 18:23	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		07/16/25 23:45	07/17/25 18:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010B)	**>200**		50		Degrees F			07/18/25 01:58	1
Cyanide, Reactive (SW846 9012)	ND		94		mg/Kg		07/22/25 07:07	07/22/25 19:04	1
Sulfide (SW846 9034)	**130**		93		mg/Kg	☼	07/14/25 07:33	07/14/25 09:56	1
Sulfide, Reactive (SW846 9034)	ND		170		mg/Kg		07/22/25 07:07	07/22/25 10:47	1
Cyanide, Total (SW846 EPA 9014)	**3.6**		0.98		mg/Kg	☼	07/11/25 13:17	07/12/25 09:20	1
Free Liquid (SW846 EPA 9095B)	**CNF**		0.10		NONE			07/10/25 15:52	1
Total Solids (SM 2540G)	**32**		0.50		%			07/10/25 11:11	1
Total Volatile Solids (SM 2540G)	**54**		0.50		%			07/10/25 11:11	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled (EPA 350.1_GD)	**85**		10		mg/L			07/14/25 12:03	100
Chemical Oxygen Demand (EPA 410.4)	**1800**		380		mg/L			07/17/25 09:39	5
Cyanide, Total (SW846 EPA 9014)	**28**		10		ug/L		07/18/25 11:51	07/18/25 18:21	1
pH (SW846 EPA 9040C)	**6.9**		0.1		SU			07/11/25 17:28	1
Temperature (SW846 EPA 9040C)	**25.6**	I	0.1		Degrees C			07/11/25 17:28	1
Total Solids (SM 2540B)	**900**		20		mg/L			07/14/25 13:32	1
Total Volatile Solids (SM 2540E)	**740**	I	20		mg/L			07/14/25 13:32	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-673750/7
Matrix: Solid
Analysis Batch: 673750

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.0010		mg/L			07/21/25 10:23	1
1,2-Dichloroethane	ND		0.0010		mg/L			07/21/25 10:23	1
2-Butanone (MEK)	ND		0.010		mg/L			07/21/25 10:23	1
Benzene	ND		0.0010		mg/L			07/21/25 10:23	1
Carbon tetrachloride	ND		0.0010		mg/L			07/21/25 10:23	1
Chlorobenzene	ND		0.0010		mg/L			07/21/25 10:23	1
Chloroform	ND		0.0010		mg/L			07/21/25 10:23	1
Naphthalene	ND		0.0050		mg/L			07/21/25 10:23	1
Tetrachloroethene	ND		0.0010		mg/L			07/21/25 10:23	1
Trichloroethene	ND		0.0010		mg/L			07/21/25 10:23	1
Vinyl chloride	ND		0.0010		mg/L			07/21/25 10:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*07/21/25 10:23*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*07/21/25 10:23*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*07/21/25 10:23*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/21/25 10:23*	*1*

Lab Sample ID: LCS 410-673750/4
Matrix: Solid
Analysis Batch: 673750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	0.0200	0.0233		mg/L		117	80 - 131
1,2-Dichloroethane	0.0200	0.0199		mg/L		100	73 - 124
2-Butanone (MEK)	0.250	0.219		mg/L		88	59 - 135
Benzene	0.0200	0.0199		mg/L		100	80 - 120
Carbon tetrachloride	0.0200	0.0207		mg/L		104	64 - 134
Chlorobenzene	0.0200	0.0213		mg/L		107	80 - 120
Chloroform	0.0200	0.0206		mg/L		103	80 - 120
Naphthalene	0.0200	0.0178		mg/L		89	67 - 124
Tetrachloroethene	0.0200	0.0234		mg/L		117	80 - 120
Trichloroethene	0.0200	0.0209		mg/L		105	80 - 120
Vinyl chloride	0.0200	0.0176		mg/L		88	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 410-673750/5
Matrix: Solid
Analysis Batch: 673750

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	0.0200	0.0231		mg/L		116	80 - 131	1	30
1,2-Dichloroethane	0.0200	0.0198		mg/L		99	73 - 124	1	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-673750/5
Matrix: Solid
Analysis Batch: 673750

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Butanone (MEK)			0.250	0.214		mg/L		86	59 - 135	2	30
Benzene			0.0200	0.0198		mg/L		99	80 - 120	1	30
Carbon tetrachloride			0.0200	0.0207		mg/L		104	64 - 134	0	30
Chlorobenzene			0.0200	0.0209		mg/L		105	80 - 120	2	30
Chloroform			0.0200	0.0206		mg/L		103	80 - 120	0	30
Naphthalene			0.0200	0.0167		mg/L		83	67 - 124	6	30
Tetrachloroethene			0.0200	0.0234		mg/L		117	80 - 120	0	30
Trichloroethene			0.0200	0.0205		mg/L		103	80 - 120	2	30
Vinyl chloride			0.0200	0.0174		mg/L		87	56 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 180-192851-I-1-C MS
Matrix: Solid
Analysis Batch: 673750

Client Sample ID: Matrix Spike
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1-Dichloroethene	ND	FL ^c	0.400	0.250	FL	mg/L		63	74 - 121		
1,2-Dichloroethane	ND		0.400	0.382		mg/L		96	69 - 120		
2-Butanone (MEK)	ND	^c	5.00	3.90		mg/L		78	65 - 131		
Benzene	ND		0.400	0.377		mg/L		92	81 - 120		
Carbon tetrachloride	ND		0.400	0.383		mg/L		96	63 - 128		
Chlorobenzene	ND		0.400	0.399		mg/L		100	80 - 120		
Chloroform	ND		0.400	0.391		mg/L		98	74 - 120		
Naphthalene	ND		0.400	0.290		mg/L		73	62 - 120		
Tetrachloroethene	ND		0.400	0.429		mg/L		107	68 - 125		
Trichloroethene	ND		0.400	0.396		mg/L		99	76 - 120		
Vinyl chloride	ND		0.400	0.256		mg/L		64	52 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 180-192851-I-1-C MSD
Matrix: Solid
Analysis Batch: 673750

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	ND	FL ^c	0.400	0.268	FL	mg/L		67	74 - 121	7	30
1,2-Dichloroethane	ND		0.400	0.382		mg/L		96	69 - 120	0	30
2-Butanone (MEK)	ND	^c	5.00	4.07		mg/L		81	65 - 131	4	30
Benzene	ND		0.400	0.389		mg/L		95	81 - 120	3	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 180-192851-I-1-C MSD
Matrix: Solid
Analysis Batch: 673750

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon tetrachloride	ND		0.400	0.394		mg/L		99	63 - 128	3	30
Chlorobenzene	ND		0.400	0.411		mg/L		103	80 - 120	3	30
Chloroform	ND		0.400	0.395		mg/L		99	74 - 120	1	30
Naphthalene	ND		0.400	0.301		mg/L		75	62 - 120	4	30
Tetrachloroethene	ND		0.400	0.445		mg/L		111	68 - 125	4	30
Trichloroethene	ND		0.400	0.411		mg/L		103	76 - 120	4	30
Vinyl chloride	ND		0.400	0.268		mg/L		67	52 - 120	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-499325/1-A
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499325

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Acenaphthylene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Acetophenone	ND		670		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Anthracene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Atrazine	ND		670		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Benzaldehyde	ND		670		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Benzo[a]anthracene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Benzo[b]fluoranthene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Benzo[k]fluoranthene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Benzo[g,h,i]perylene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Benzo[a]pyrene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
1,1'-Biphenyl	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Bis(2-chloroethoxy)methane	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Bis(2-chloroethyl)ether	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2,2'-oxybis[1-chloropropane]	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Bis(2-ethylhexyl) phthalate	ND		3300		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
4-Bromophenyl phenyl ether	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Butyl benzyl phthalate	ND		1700		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Caprolactam	ND		1700		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Carbazole	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
4-Chloroaniline	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
4-Chloro-3-methylphenol	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2-Chloronaphthalene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2-Chlorophenol	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
4-Chlorophenyl phenyl ether	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Chrysene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Dibenz(a,h)anthracene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Dibenzofuran	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-499325/1-A
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499325

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		3300		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
3,3'-Dichlorobenzidine	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2,4-Dichlorophenol	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Diethyl phthalate	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2,4-Dimethylphenol	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Dimethyl phthalate	ND		670		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
4,6-Dinitro-2-methylphenol	ND		1700		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2,4-Dinitrophenol	ND		3300		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2,4-Dinitrotoluene	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2,6-Dinitrotoluene	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Di-n-octyl phthalate	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Fluoranthene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Fluorene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Hexachlorobenzene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Hexachlorobutadiene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Hexachlorocyclopentadiene	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Hexachloroethane	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Indeno[1,2,3-cd]pyrene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Isophorone	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2-Methylnaphthalene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2-Methylphenol	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Methylphenol, 3 & 4	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Naphthalene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2-Nitroaniline	ND		1700		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
3-Nitroaniline	ND		1700		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
4-Nitroaniline	ND		1700		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Nitrobenzene	ND		670		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2-Nitrophenol	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
4-Nitrophenol	ND		1700		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
N-Nitrosodiphenylamine	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
N-Nitrosodi-n-propylamine	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Pentachlorophenol	ND		1700		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Phenanthrene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Phenol	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
Pyrene	ND		67		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2,4,5-Trichlorophenol	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1
2,4,6-Trichlorophenol	ND		330		ug/Kg		07/10/25 16:15	07/11/25 11:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*44 - 105*	*07/10/25 16:15*	*07/11/25 11:24*	*1*
2-Fluorophenol	*85*		*48 - 105*	*07/10/25 16:15*	*07/11/25 11:24*	*1*
2,4,6-Tribromophenol	*75*		*34 - 108*	*07/10/25 16:15*	*07/11/25 11:24*	*1*
Nitrobenzene-d5	*86*		*46 - 105*	*07/10/25 16:15*	*07/11/25 11:24*	*1*
Phenol-d5	*87*		*46 - 105*	*07/10/25 16:15*	*07/11/25 11:24*	*1*
Terphenyl-d14	*86*		*39 - 105*	*07/10/25 16:15*	*07/11/25 11:24*	*1*

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-499325/2-A
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499325

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	6670	4150		ug/Kg		62	50 - 100
Acenaphthylene	6670	4400		ug/Kg		66	52 - 100
Acetophenone	6670	4590		ug/Kg		69	48 - 100
Anthracene	6670	4390		ug/Kg		66	53 - 100
Atrazine	6670	4860		ug/Kg		73	49 - 103
Benzaldehyde	6670	4700		ug/Kg		70	23 - 105
Benzo[a]anthracene	6670	4460		ug/Kg		67	51 - 100
Benzo[b]fluoranthene	6670	4450		ug/Kg		67	48 - 100
Benzo[k]fluoranthene	6670	4430		ug/Kg		66	19 - 100
Benzo[g,h,i]perylene	6670	4070		ug/Kg		61	48 - 105
Benzo[e]pyrene	6670	4380		ug/Kg		66	51 - 100
1,1'-Biphenyl	6670	4290		ug/Kg		64	50 - 100
Bis(2-chloroethoxy)methane	6670	3530		ug/Kg		53	49 - 100
Bis(2-chloroethyl)ether	6670	4440		ug/Kg		67	48 - 100
2,2'-oxybis[1-chloropropane]	6670	5360		ug/Kg		80	30 - 113
Bis(2-ethylhexyl) phthalate	6670	5830		ug/Kg		87	53 - 107
4-Bromophenyl phenyl ether	6670	4530		ug/Kg		66	52 - 101
Butyl benzyl phthalate	6670	5550		ug/Kg		83	52 - 107
Caprolactam	6670	4430		ug/Kg		66	48 - 111
Carbazole	6670	4230		ug/Kg		63	53 - 100
4-Chloroaniline	6670	4270		ug/Kg		64	47 - 100
4-Chloro-3-methylphenol	6670	4420		ug/Kg		66	49 - 106
2-Chloronaphthalene	6670	4220		ug/Kg		63	51 - 100
2-Chlorophenol	6670	4780		ug/Kg		72	51 - 100
4-Chlorophenyl phenyl ether	6670	3980		ug/Kg		60	52 - 100
Chrysene	6670	3970		ug/Kg		60	50 - 100
Dibenz(a,h)anthracene	6670	4530		ug/Kg		68	50 - 107
Dibenzofuran	6670	4050		ug/Kg		61	52 - 100
Di-n-butyl phthalate	6670	4790		ug/Kg		72	57 - 102
3,3'-Dichlorobenzidine	6670	4130		ug/Kg		62	43 - 100
2,4-Dichlorophenol	6670	4350		ug/Kg		65	53 - 101
Diethyl phthalate	6670	4100		ug/Kg		61	48 - 104
2,4-Dimethylphenol	6670	4530		ug/Kg		68	51 - 101
Dimethyl phthalate	6670	4220		ug/Kg		63	53 - 100
4,6-Dinitro-2-methylphenol	13300	8670		ug/Kg		65	51 - 100
2,4-Dinitrophenol	13300	7920		ug/Kg		59	33 - 101
2,4-Dinitrotoluene	6670	4290		ug/Kg		64	54 - 104
2,6-Dinitrotoluene	6670	4350		ug/Kg		65	51 - 106
Di-n-octyl phthalate	6670	6850		ug/Kg		103	41 - 106
Fluoranthene	6670	4040		ug/Kg		61	55 - 100
Fluorene	6670	4020		ug/Kg		60	52 - 100
Hexachlorobenzene	6670	4110		ug/Kg		62	49 - 100
Hexachlorobutadiene	6670	4060		ug/Kg		61	38 - 107
Hexachlorocyclopentadiene	6670	5160		ug/Kg		77	33 - 117
Hexachloroethane	6670	4640		ug/Kg		70	47 - 100
Indeno[1,2,3-cd]pyrene	6670	4340		ug/Kg		65	51 - 103
Isophorone	6670	3930		ug/Kg		59	48 - 105
2-Methylnaphthalene	6670	4230		ug/Kg		63	53 - 100

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-499325/2-A
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499325

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylphenol	6670	4840		ug/Kg		73	50 - 101
Methylphenol, 3 & 4	6670	4800		ug/Kg		72	50 - 103
Naphthalene	6670	4220		ug/Kg		63	51 - 100
2-Nitroaniline	6670	5280		ug/Kg		79	42 - 123
3-Nitroaniline	6670	4370		ug/Kg		66	50 - 103
4-Nitroaniline	6670	3960		ug/Kg		59	52 - 103
Nitrobenzene	6670	4740		ug/Kg		71	44 - 108
2-Nitrophenol	6670	4790		ug/Kg		72	55 - 107
4-Nitrophenol	13300	8620		ug/Kg		65	30 - 134
N-Nitrosodiphenylamine	6670	4630		ug/Kg		69	52 - 100
N-Nitrosodi-n-propylamine	6670	5200		ug/Kg		78	45 - 107
Pentachlorophenol	13300	8860		ug/Kg		66	42 - 110
Phenanthrene	6670	4300		ug/Kg		65	53 - 100
Phenol	6670	4850		ug/Kg		73	49 - 100
Pyrene	6670	4810		ug/Kg		72	52 - 100
2,4,5-Trichlorophenol	6670	4510		ug/Kg		66	50 - 104
2,4,6-Trichlorophenol	6670	4770		ug/Kg		71	50 - 105

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*44 - 105*
2-Fluorophenol	*73*		*48 - 105*
2,4,6-Tribromophenol	*69*		*34 - 108*
Nitrobenzene-d5	*73*		*46 - 105*
Phenol-d5	*72*		*46 - 105*
Terphenyl-d14	*50*		*39 - 105*

Lab Sample ID: 180-192851-D-1-B MS
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499325

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		9060	6490		ug/Kg	☼	72	50 - 100
Acenaphthylene	ND		9060	6740		ug/Kg	☼	74	52 - 100
Acetophenone	ND		9060	6600		ug/Kg	☼	73	48 - 100
Anthracene	ND		9060	6820		ug/Kg	☼	75	53 - 100
Atrazine	ND		9060	5140		ug/Kg	☼	57	49 - 103
Benzaldehyde	ND	FL	9060	933	FL	ug/Kg	☼	10	23 - 105
Benzo[a]anthracene	ND		9060	7180		ug/Kg	☼	79	51 - 100
Benzo[b]fluoranthene	ND		9060	7180		ug/Kg	☼	79	48 - 100
Benzo[k]fluoranthene	ND		9060	7270		ug/Kg	☼	80	19 - 100
Benzo[g,h,i]perylene	ND		9060	6150		ug/Kg	☼	68	48 - 105
Benzo[a]pyrene	ND		9060	6930		ug/Kg	☼	76	51 - 100
1,1'-Biphenyl	ND		9060	6600		ug/Kg	☼	73	50 - 100
Bis(2-chloroethoxy)methane	ND		9060	5590		ug/Kg	☼	62	49 - 100
Bis(2-chloroethyl)ether	ND		9060	6420		ug/Kg	☼	71	48 - 100
2,2'-oxybis[1-chloropropane]	ND		9060	7840		ug/Kg	☼	87	30 - 113
Bis(2-ethylhexyl) phthalate	ND	^c	9060	9310		ug/Kg	☼	103	53 - 107
4-Bromophenyl phenyl ether	ND		9060	7070		ug/Kg	☼	78	52 - 101

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-192851-D-1-B MS
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499325

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Butyl benzyl phthalate	ND	^c	9060	9150		ug/Kg	☼	101	52 - 107
Caprolactam	ND		9060	7270		ug/Kg	☼	80	48 - 111
Carbazole	ND		9060	6660		ug/Kg	☼	73	53 - 100
4-Chloroaniline	ND		9060	5920		ug/Kg	☼	65	47 - 100
4-Chloro-3-methylphenol	ND		9060	7140		ug/Kg	☼	79	49 - 106
2-Chloronaphthalene	ND		9060	6470		ug/Kg	☼	71	51 - 100
2-Chlorophenol	ND		9060	7180		ug/Kg	☼	79	51 - 100
4-Chlorophenyl phenyl ether	ND		9060	6070		ug/Kg	☼	67	52 - 100
Chrysene	ND		9060	6380		ug/Kg	☼	70	50 - 100
Dibenz(a,h)anthracene	ND		9060	6840		ug/Kg	☼	76	50 - 107
Dibenzofuran	ND		9060	6250		ug/Kg	☼	69	52 - 100
Di-n-butyl phthalate	ND		9060	7510		ug/Kg	☼	83	57 - 102
3,3'-Dichlorobenzidine	ND		9060	5550		ug/Kg	☼	61	43 - 100
2,4-Dichlorophenol	ND		9060	6820		ug/Kg	☼	75	53 - 101
Diethyl phthalate	ND		9060	6580		ug/Kg	☼	73	48 - 104
2,4-Dimethylphenol	ND		9060	7140		ug/Kg	☼	79	51 - 101
Dimethyl phthalate	ND		9060	6630		ug/Kg	☼	73	53 - 100
4,6-Dinitro-2-methylphenol	ND	FL	18100	9530		ug/Kg	☼	53	51 - 100
2,4-Dinitrophenol	ND	FL	18100	4780	FL	ug/Kg	☼	26	33 - 101
2,4-Dinitrotoluene	ND		9060	6840		ug/Kg	☼	75	54 - 104
2,6-Dinitrotoluene	ND		9060	6790		ug/Kg	☼	75	51 - 106
Di-n-octyl phthalate	ND	^c FH	9060	11600	FH	ug/Kg	☼	128	41 - 106
Fluoranthene	ND		9060	6570		ug/Kg	☼	73	55 - 100
Fluorene	ND		9060	6130		ug/Kg	☼	68	52 - 100
Hexachlorobenzene	ND		9060	6460		ug/Kg	☼	71	49 - 100
Hexachlorobutadiene	ND		9060	6290		ug/Kg	☼	69	38 - 107
Hexachlorocyclopentadiene	ND		9060	7310		ug/Kg	☼	81	33 - 117
Hexachloroethane	ND		9060	6840		ug/Kg	☼	76	47 - 100
Indeno[1,2,3-cd]pyrene	ND		9060	6740		ug/Kg	☼	74	51 - 103
Isophorone	ND		9060	6240		ug/Kg	☼	69	48 - 105
2-Methylnaphthalene	ND		9060	6690		ug/Kg	☼	74	53 - 100
2-Methylphenol	ND		9060	7220		ug/Kg	☼	80	50 - 101
Methylphenol, 3 & 4	ND		9060	7230		ug/Kg	☼	80	50 - 103
Naphthalene	ND		9060	6510		ug/Kg	☼	72	51 - 100
2-Nitroaniline	ND	^c	9060	8310		ug/Kg	☼	92	42 - 123
3-Nitroaniline	ND		9060	6400		ug/Kg	☼	71	50 - 103
4-Nitroaniline	ND		9060	5990		ug/Kg	☼	66	52 - 103
Nitrobenzene	ND		9060	7480		ug/Kg	☼	83	44 - 108
2-Nitrophenol	ND		9060	7610		ug/Kg	☼	84	55 - 107
4-Nitrophenol	ND		18100	13500		ug/Kg	☼	75	30 - 134
N-Nitrosodiphenylamine	ND		9060	7090		ug/Kg	☼	78	52 - 100
N-Nitrosodi-n-propylamine	ND		9060	7940		ug/Kg	☼	88	45 - 107
Pentachlorophenol	ND		18100	10900		ug/Kg	☼	60	42 - 110
Phenanthrene	ND		9060	6710		ug/Kg	☼	74	53 - 100
Phenol	ND		9060	7200		ug/Kg	☼	79	49 - 100
Pyrene	ND		9060	7880		ug/Kg	☼	87	52 - 100
2,4,5-Trichlorophenol	ND		9060	6920		ug/Kg	☼	76	50 - 104
2,4,6-Trichlorophenol	ND		9060	7430		ug/Kg	☼	82	50 - 105

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-192851-D-1-B MS
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 499325

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*44 - 105*
2-Fluorophenol	*96*		*48 - 105*
2,4,6-Tribromophenol	*93*		*34 - 108*
Nitrobenzene-d5	*101*		*46 - 105*
Phenol-d5	*93*		*46 - 105*
Terphenyl-d14	*103*		*39 - 105*

Lab Sample ID: 180-192851-D-1-C MSD
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499325

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		9240	6520		ug/Kg	☼	71	50 - 100	0	20
Acenaphthylene	ND		9240	6740		ug/Kg	☼	73	52 - 100	0	20
Acetophenone	ND		9240	6610		ug/Kg	☼	72	48 - 100	0	17
Anthracene	ND		9240	6950		ug/Kg	☼	75	53 - 100	2	20
Atrazine	ND		9240	5180		ug/Kg	☼	56	49 - 103	1	19
Benzaldehyde	ND	FL	9240	973	FL	ug/Kg	☼	11	23 - 105	4	31
Benzo[a]anthracene	ND		9240	7270		ug/Kg	☼	79	51 - 100	1	21
Benzo[b]fluoranthene	ND		9240	7120		ug/Kg	☼	77	48 - 100	1	20
Benzo[k]fluoranthene	ND		9240	7110		ug/Kg	☼	77	19 - 100	2	20
Benzo[g,h,i]perylene	ND		9240	6470		ug/Kg	☼	70	48 - 105	5	19
Benzo[a]pyrene	ND		9240	6950		ug/Kg	☼	75	51 - 100	0	20
1,1'-Biphenyl	ND		9240	6630		ug/Kg	☼	72	50 - 100	0	19
Bis(2-chloroethoxy)methane	ND		9240	5520		ug/Kg	☼	60	49 - 100	1	20
Bis(2-chloroethyl)ether	ND		9240	6840		ug/Kg	☼	74	48 - 100	6	18
2,2'-oxybis[1-chloropropane]	ND		9240	8070		ug/Kg	☼	87	30 - 113	3	17
Bis(2-ethylhexyl) phthalate	ND	^c	9240	9370		ug/Kg	☼	101	53 - 107	1	20
4-Bromophenyl phenyl ether	ND		9240	7130		ug/Kg	☼	77	52 - 101	1	20
Butyl benzyl phthalate	ND	^c	9240	9210		ug/Kg	☼	100	52 - 107	1	19
Caprolactam	ND		9240	7080		ug/Kg	☼	77	48 - 111	3	23
Carbazole	ND		9240	6640		ug/Kg	☼	72	53 - 100	0	20
4-Chloroaniline	ND		9240	5890		ug/Kg	☼	64	47 - 100	0	20
4-Chloro-3-methylphenol	ND		9240	7160		ug/Kg	☼	77	49 - 108	0	20
2-Chloronaphthalene	ND		9240	6590		ug/Kg	☼	71	51 - 100	2	20
2-Chlorophenol	ND		9240	7360		ug/Kg	☼	80	51 - 100	3	17
4-Chlorophenyl phenyl ether	ND		9240	6150		ug/Kg	☼	67	52 - 100	1	19
Chrysene	ND		9240	6410		ug/Kg	☼	69	50 - 100	0	20
Dibenz(a,h)anthracene	ND		9240	7030		ug/Kg	☼	76	50 - 107	3	21
Dibenzofuran	ND		9240	6330		ug/Kg	☼	69	52 - 100	1	19
Di-n-butyl phthalate	ND		9240	7610		ug/Kg	☼	82	57 - 102	1	20
3,3'-Dichlorobenzidine	ND		9240	5630		ug/Kg	☼	61	43 - 100	2	19
2,4-Dichlorophenol	ND		9240	6900		ug/Kg	☼	75	53 - 101	1	22
Diethyl phthalate	ND		9240	6480		ug/Kg	☼	70	48 - 104	1	20
2,4-Dimethylphenol	ND		9240	7220		ug/Kg	☼	78	51 - 101	1	32
Dimethyl phthalate	ND		9240	6640		ug/Kg	☼	72	53 - 100	0	21
4,6-Dinitro-2-methylphenol	ND	FL	18500	8840	FL	ug/Kg	☼	48	51 - 100	7	22
2,4-Dinitrophenol	ND	FL	18500	ND	FL	ug/Kg	☼	23	33 - 101	13	20

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-192851-D-1-C MSD
Matrix: Solid
Analysis Batch: 499353

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 499325

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-Dinitrotoluene	ND		9240	6510		ug/Kg	☼	70	54 - 104	5	20
2,6-Dinitrotoluene	ND		9240	6820		ug/Kg	☼	74	51 - 106	0	20
Di-n-octyl phthalate	ND	^c FH	9240	11200	FH	ug/Kg	☼	121	41 - 108	3	18
Fluoranthene	ND		9240	6300		ug/Kg	☼	68	55 - 100	4	20
Fluorene	ND		9240	6150		ug/Kg	☼	67	52 - 100	0	19
Hexachlorobenzene	ND		9240	6630		ug/Kg	☼	72	49 - 100	3	20
Hexachlorobutadiene	ND		9240	6320		ug/Kg	☼	68	38 - 107	0	22
Hexachlorocyclopentadiene	ND		9240	7620		ug/Kg	☼	82	33 - 117	4	19
Hexachloroethane	ND		9240	7140		ug/Kg	☼	77	47 - 100	4	17
Indeno[1,2,3-cd]pyrene	ND		9240	6910		ug/Kg	☼	75	51 - 103	3	19
Isophorone	ND		9240	6180		ug/Kg	☼	67	48 - 105	1	20
2-Methylnaphthalene	ND		9240	6680		ug/Kg	☼	72	53 - 100	0	21
2-Methylphenol	ND		9240	7480		ug/Kg	☼	81	50 - 101	4	17
Methylphenol, 3 & 4	ND		9240	7380		ug/Kg	☼	80	50 - 103	2	19
Naphthalene	ND		9240	6580		ug/Kg	☼	71	51 - 100	1	20
2-Nitroaniline	ND	^c	9240	8310		ug/Kg	☼	90	42 - 123	0	19
3-Nitroaniline	ND		9240	6400		ug/Kg	☼	89	50 - 103	0	20
4-Nitroaniline	ND		9240	5590		ug/Kg	☼	61	52 - 103	7	18
Nitrobenzene	ND		9240	7500		ug/Kg	☼	81	44 - 108	0	21
2-Nitrophenol	ND		9240	7700		ug/Kg	☼	83	55 - 107	1	19
4-Nitrophenol	ND		18500	12900		ug/Kg	☼	70	30 - 134	4	18
N-Nitrosodiphenylamine	ND		9240	7210		ug/Kg	☼	78	52 - 100	2	20
N-Nitrosodi-n-propylamine	ND		9240	8190		ug/Kg	☼	89	45 - 107	3	18
Pentachlorophenol	ND		18500	10900		ug/Kg	☼	59	42 - 110	0	20
Phenanthrene	ND		9240	6810		ug/Kg	☼	74	53 - 100	2	20
Phenol	ND		9240	7430		ug/Kg	☼	80	49 - 100	3	16
Pyrene	ND		9240	8180		ug/Kg	☼	89	52 - 100	4	20
2,4,5-Trichlorophenol	ND		9240	6920		ug/Kg	☼	75	50 - 104	0	21
2,4,6-Trichlorophenol	ND		9240	7400		ug/Kg	☼	80	50 - 105	0	21

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*44 - 105*
2-Fluorophenol	*94*		*48 - 105*
2,4,6-Tribromophenol	*94*		*34 - 108*
Nitrobenzene-d5	*100*		*46 - 105*
Phenol-d5	*92*		*46 - 105*
Terphenyl-d14	*101*		*39 - 105*

Lab Sample ID: MB 180-499422/1-A
Matrix: Solid
Analysis Batch: 499453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1
Pyridine	ND		0.10		mg/L		07/11/25 22:09	07/14/25 08:36	1
2,4-Dinitrotoluene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1
Hexachlorobenzene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1
Hexachlorobutadiene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:36	1

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-499422/1-A
Matrix: Solid
Analysis Batch: 499453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499422

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1
2-Methylphenol	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1
Methylphenol, 3 & 4	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1
Nitrobenzene	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1
Pentachlorophenol	ND		0.25		mg/L		07/11/25 22:09	07/14/25 08:38	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		07/11/25 22:09	07/14/25 08:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*10 - 130*	*07/11/25 22:09*	*07/14/25 08:38*	*1*
2-Fluorophenol	*87*		*10 - 130*	*07/11/25 22:09*	*07/14/25 08:38*	*1*
2,4,6-Tribromophenol	*75*		*10 - 130*	*07/11/25 22:09*	*07/14/25 08:38*	*1*
Nitrobenzene-d5	*91*		*10 - 130*	*07/11/25 22:09*	*07/14/25 08:38*	*1*
Phenol-d5	*90*		*10 - 130*	*07/11/25 22:09*	*07/14/25 08:38*	*1*
Terphenyl-d14	*83*		*10 - 130*	*07/11/25 22:09*	*07/14/25 08:36*	*1*

Lab Sample ID: LCS 180-499422/2-A
Matrix: Solid
Analysis Batch: 499453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499422

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	0.250	0.228		mg/L		91	10 - 130
Pyridine	0.250	0.229		mg/L		91	10 - 130
2,4-Dinitrotoluene	0.250	0.186		mg/L		74	10 - 130
Hexachlorobenzene	0.250	0.163		mg/L		65	10 - 130
Hexachlorobutadiene	0.250	0.203		mg/L		81	10 - 130
Hexachloroethane	0.250	0.237		mg/L		95	10 - 130
2-Methylphenol	0.250	0.249		mg/L		100	10 - 130
Methylphenol, 3 & 4	0.500	0.508		mg/L		102	10 - 130
Nitrobenzene	0.250	0.253		mg/L		101	10 - 130
Pentachlorophenol	0.250	0.195	J	mg/L		78	10 - 130
2,4,5-Trichlorophenol	0.250	0.237		mg/L		95	10 - 130
2,4,6-Trichlorophenol	0.250	0.225		mg/L		90	10 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*10 - 130*
2-Fluorophenol	*96*		*10 - 130*
2,4,6-Tribromophenol	*83*		*10 - 130*
Nitrobenzene-d5	*98*		*10 - 130*
Phenol-d5	*101*		*10 - 130*
Terphenyl-d14	*69*		*10 - 130*

Lab Sample ID: LCSD 180-499422/3-A
Matrix: Solid
Analysis Batch: 499453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499422

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dichlorobenzene	0.250	0.208		mg/L		83	10 - 130	9	15

Method: EPA 8270E - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 180-499422/3-A
Matrix: Solid
Analysis Batch: 499453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499422

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pyridine	0.250	0.213		mg/L		85	10 - 130	7	15
2,4-Dinitrotoluene	0.250	0.167		mg/L		67	10 - 130	10	15
Hexachlorobenzene	0.250	0.146		mg/L		58	10 - 130	11	15
Hexachlorobutadiene	0.250	0.192		mg/L		77	10 - 130	5	15
Hexachloroethane	0.250	0.209		mg/L		84	10 - 130	13	15
2-Methylphenol	0.250	0.219		mg/L		88	10 - 130	13	15
Methylphenol, 3 & 4	0.500	0.454		mg/L		91	10 - 130	11	15
Nitrobenzene	0.250	0.239		mg/L		98	10 - 130	6	15
Pentachlorophenol	0.250	0.173	J	mg/L		69	10 - 130	12	27
2,4,5-Trichlorophenol	0.250	0.212		mg/L		85	10 - 130	11	15
2,4,6-Trichlorophenol	0.250	0.204		mg/L		81	10 - 130	10	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*10 - 130*
2-Fluorophenol	*86*		*10 - 130*
2,4,6-Tribromophenol	*76*		*10 - 130*
Nitrobenzene-d5	*90*		*10 - 130*
Phenol-d5	*87*		*10 - 130*
Terphenyl-d14	*82*		*10 - 130*

Lab Sample ID: LB 180-499274/1-D
Matrix: Solid
Analysis Batch: 499453

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 499422

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
Pyridine	ND		0.10		mg/L		07/11/25 22:10	07/14/25 11:04	1
2,4-Dinitrotoluene	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
Hexachlorobenzene	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
Hexachlorobutadiene	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
Hexachloroethane	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
2-Methylphenol	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
Methylphenol, 3 & 4	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
Nitrobenzene	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
Pentachlorophenol	ND		0.25		mg/L		07/11/25 22:10	07/14/25 11:04	1
2,4,5-Trichlorophenol	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1
2,4,6-Trichlorophenol	ND		0.050		mg/L		07/11/25 22:10	07/14/25 11:04	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*10 - 130*	*07/11/25 22:10*	*07/14/25 11:04*	*1*
2-Fluorophenol	*91*		*10 - 130*	*07/11/25 22:10*	*07/14/25 11:04*	*1*
2,4,6-Tribromophenol	*78*		*10 - 130*	*07/11/25 22:10*	*07/14/25 11:04*	*1*
Nitrobenzene-d5	*93*		*10 - 130*	*07/11/25 22:10*	*07/14/25 11:04*	*1*
Phenol-d5	*92*		*10 - 130*	*07/11/25 22:10*	*07/14/25 11:04*	*1*
Terphenyl-d14	*88*		*10 - 130*	*07/11/25 22:10*	*07/14/25 11:04*	*1*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Method: EPA 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 180-499261/1-A
Matrix: Solid
Analysis Batch: 499378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499261

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
alpha-BHC	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
beta-BHC	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
delta-BHC	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
gamma-BHC (Lindane)	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
cis-Chlordane	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
trans-Chlordane	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
4,4'-DDD	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Chlordane (technical)	ND		17		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
4,4'-DDE	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
4,4'-DDT	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Dieldrin	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Endosulfan I	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Endosulfan II	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Endosulfan sulfate	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Endrin	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Endrin aldehyde	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Endrin ketone	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Heptachlor	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Heptachlor epoxide	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Methoxychlor	ND		1.7		ug/Kg		07/10/25 05:42	07/12/25 00:15	1
Toxaphene	ND		67		ug/Kg		07/10/25 05:42	07/12/25 00:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*97*		*53 - 124*	*07/10/25 05:42*	*07/12/25 00:15*	*1*
Tetrachloro-m-xylene	*88*		*53 - 124*	*07/10/25 05:42*	*07/12/25 00:15*	*1*
DCB Decachlorobiphenyl (Surr)	*84*		*36 - 142*	*07/10/25 05:42*	*07/12/25 00:15*	*1*
DCB Decachlorobiphenyl (Surr)	*80*		*36 - 142*	*07/10/25 05:42*	*07/12/25 00:15*	*1*

Lab Sample ID: LCS 180-499261/2-A
Matrix: Solid
Analysis Batch: 499378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499261

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	33.3	33.5		ug/Kg		101	60 - 136
alpha-BHC	33.3	32.4		ug/Kg		97	62 - 138
beta-BHC	33.3	33.7		ug/Kg		101	60 - 130
delta-BHC	33.3	14.0		ug/Kg		42	41 - 136
gamma-BHC (Lindane)	33.3	33.1		ug/Kg		99	64 - 138
cis-Chlordane	33.3	32.9		ug/Kg		99	57 - 135
trans-Chlordane	33.3	33.7		ug/Kg		101	59 - 137
4,4'-DDD	33.3	35.8		ug/Kg		107	56 - 137
4,4'-DDE	33.3	36.2		ug/Kg		109	64 - 132
4,4'-DDT	33.3	32.6		ug/Kg		98	44 - 129
Dieldrin	33.3	36.4		ug/Kg		109	68 - 133
Endosulfan I	33.3	33.6		ug/Kg		101	53 - 148
Endosulfan II	33.3	31.2		ug/Kg		94	65 - 130
Endosulfan sulfate	33.3	15.7	*-	ug/Kg		47	50 - 132

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 180-499261/2-A
Matrix: Solid
Analysis Batch: 499378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499261

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Endrin	33.3	39.5		ug/Kg		119	72 - 138
Endrin aldehyde	33.3	19.8		ug/Kg		59	47 - 139
Endrin ketone	33.3	29.6		ug/Kg		89	62 - 129
Heptachlor	33.3	32.7		ug/Kg		98	56 - 144
Heptachlor epoxide	33.3	34.5		ug/Kg		103	65 - 140
Methoxychlor	33.3	32.0		ug/Kg		98	37 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*102*		*53 - 124*
Tetrachloro-m-xylene	*92*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*96*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*87*		*36 - 142*

Lab Sample ID: LCSD 180-499261/3-A
Matrix: Solid
Analysis Batch: 499378

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499261

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	33.3	33.9		ug/Kg		102	60 - 136	1	21
alpha-BHC	33.3	33.0		ug/Kg		99	62 - 138	2	31
beta-BHC	33.3	34.3		ug/Kg		103	60 - 130	2	30
delta-BHC	33.3	15.3		ug/Kg		46	41 - 136	9	23
gamma-BHC (Lindane)	33.3	34.1		ug/Kg		102	64 - 136	3	30
cis-Chlordane	33.3	33.5		ug/Kg		100	57 - 135	2	22
trans-Chlordane	33.3	34.6		ug/Kg		104	59 - 137	3	22
4,4'-DDD	33.3	36.5		ug/Kg		109	56 - 137	2	22
4,4'-DDE	33.3	35.9		ug/Kg		106	64 - 132	1	16
4,4'-DDT	33.3	33.1		ug/Kg		99	44 - 129	2	37
Dieldrin	33.3	36.4		ug/Kg		109	68 - 133	0	18
Endosulfan I	33.3	34.4		ug/Kg		103	53 - 148	2	23
Endosulfan II	33.3	31.8		ug/Kg		95	65 - 130	2	16
Endosulfan sulfate	33.3	18.5		ug/Kg		55	60 - 132	16	21
Endrin	33.3	39.9		ug/Kg		120	72 - 138	1	17
Endrin aldehyde	33.3	18.3		ug/Kg		55	47 - 139	8	19
Endrin ketone	33.3	31.0		ug/Kg		93	62 - 129	4	21
Heptachlor	33.3	33.0		ug/Kg		99	56 - 144	1	19
Heptachlor epoxide	33.3	35.4		ug/Kg		106	65 - 140	3	21
Methoxychlor	33.3	31.7		ug/Kg		95	37 - 140	1	17

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*104*		*53 - 124*
Tetrachloro-m-xylene	*94*		*53 - 124*
DCB Decachlorobiphenyl (Surr)	*94*		*36 - 142*
DCB Decachlorobiphenyl (Surr)	*91*		*36 - 142*

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 180-499421/1-A
Matrix: Solid
Analysis Batch: 499458

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499421

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 20:32	1
Chlordane (technical)	ND		0.0050		mg/L		07/11/25 22:06	07/14/25 20:32	1
Endrin	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 20:32	1
Heptachlor	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 20:32	1
Heptachlor epoxide	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 20:32	1
Methoxychlor	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 20:32	1
Toxaphene	ND		0.040		mg/L		07/11/25 22:06	07/14/25 20:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*126*		*15 - 141*	*07/11/25 22:06*	*07/14/25 20:32*	*1*
DCB Decachlorobiphenyl (Surr)	*113*		*33 - 120*	*07/11/25 22:06*	*07/14/25 20:32*	*1*

Lab Sample ID: LCS 180-499421/2-A
Matrix: Solid
Analysis Batch: 499458

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499421

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-BHC (Lindane)	0.0100	0.0109		mg/L		109	62 - 120
Endrin	0.0100	0.0133		mg/L		133	62 - 138
Heptachlor	0.0100	0.0107		mg/L		107	53 - 119
Heptachlor epoxide	0.0100	0.0109		mg/L		109	63 - 125
Methoxychlor	0.0100	0.0107		mg/L		107	38 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*110*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*100*		*33 - 120*

Lab Sample ID: LCSD 180-499421/3-A
Matrix: Solid
Analysis Batch: 499458

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499421

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
gamma-BHC (Lindane)	0.0100	0.0111		mg/L		111	62 - 120	3	16
Endrin	0.0100	0.0134		mg/L		134	62 - 138	1	15
Heptachlor	0.0100	0.0110		mg/L		110	53 - 119	3	16
Heptachlor epoxide	0.0100	0.0114		mg/L		114	63 - 125	5	17
Methoxychlor	0.0100	0.0103		mg/L		103	38 - 137	3	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*114*		*15 - 141*
DCB Decachlorobiphenyl (Surr)	*102*		*33 - 120*

Lab Sample ID: LB 180-499274/1-C
Matrix: Solid
Analysis Batch: 499458

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 499421

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:53	1

Method: EPA 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LB 180-499274/1-C
Matrix: Solid
Analysis Batch: 499458

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 499421

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlordane (technical)	ND		0.0050		mg/L		07/11/25 22:06	07/14/25 22:53	1
Endrin	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:53	1
Heptachlor	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:53	1
Heptachlor epoxide	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:53	1
Methoxychlor	ND		0.00050		mg/L		07/11/25 22:06	07/14/25 22:53	1
Toxaphene	ND		0.040		mg/L		07/11/25 22:06	07/14/25 22:53	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*114*		*15 - 141*	*07/11/25 22:06*	*07/14/25 22:53*	*1*
DCB Decachlorobiphenyl (Surr)	*104*		*33 - 120*	*07/11/25 22:06*	*07/14/25 22:53*	*1*

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-499420/1-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.0040		mg/L		07/11/25 22:01	07/15/25 07:18	20
Silvex (2,4,5-TP)	ND		0.0010		mg/L		07/11/25 22:01	07/15/25 07:18	20

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*90*		*13 - 111*	*07/11/25 22:01*	*07/15/25 07:18*	*20*
2,4-Dichlorophenylacetic acid	*97*		*13 - 111*	*07/11/25 22:01*	*07/15/25 07:18*	*20*

Lab Sample ID: LCS 180-499420/2-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	0.0200	0.0246	*+	mg/L		123	10 - 117
Silvex (2,4,5-TP)	0.00500	0.00621		mg/L		124	10 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*104*		*13 - 111*
2,4-Dichlorophenylacetic acid	*114*	*S1+*	*13 - 111*

Lab Sample ID: LCSD 180-499420/3-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499420

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	0.0200	0.0249	*+	mg/L		125	10 - 117	1	40
Silvex (2,4,5-TP)	0.00500	0.00629	*+	mg/L		126	10 - 125	1	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*105*		*13 - 111*
2,4-Dichlorophenylacetic acid	*112*	*S1+*	*13 - 111*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Method: EPA 8151A - Herbicides (GC)

Lab Sample ID: MB 180-499439/1-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 499439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		80		ug/Kg		07/13/25 22:01	07/15/25 10:58	1
2,4,5-T	ND		20		ug/Kg		07/13/25 22:01	07/15/25 10:58	1
Silvex (2,4,5-TP)	ND		20		ug/Kg		07/13/25 22:01	07/15/25 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*70*		*13 - 111*	*07/13/25 22:01*	*07/15/25 10:58*	*1*
2,4-Dichlorophenylacetic acid	*75*		*13 - 111*	*07/13/25 22:01*	*07/15/25 10:58*	*1*

Lab Sample ID: LCS 180-499439/2-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 499439

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-D	400	393		ug/Kg		98	10 - 117
2,4,5-T	100	109		ug/Kg		109	11 - 129
Silvex (2,4,5-TP)	100	106		ug/Kg		106	10 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*92*		*13 - 111*
2,4-Dichlorophenylacetic acid	*100*		*13 - 111*

Lab Sample ID: LCSD 180-499439/3-A
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 499439

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-D	400	393		ug/Kg		98	10 - 117	0	40
2,4,5-T	100	110		ug/Kg		110	11 - 129	1	40
Silvex (2,4,5-TP)	100	107		ug/Kg		107	10 - 125	1	37

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4-Dichlorophenylacetic acid	*92*		*13 - 111*
2,4-Dichlorophenylacetic acid	*100*		*13 - 111*

Lab Sample ID: LB 180-499274/1-B
Matrix: Solid
Analysis Batch: 499528

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 499420

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-D	ND		0.040		mg/L		07/11/25 22:01	07/15/25 10:18	20
Silvex (2,4,5-TP)	ND		0.010		mg/L		07/11/25 22:01	07/15/25 10:18	20

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4-Dichlorophenylacetic acid	*89*		*13 - 111*	*07/11/25 22:01*	*07/15/25 10:18*	*20*
2,4-Dichlorophenylacetic acid	*95*		*13 - 111*	*07/11/25 22:01*	*07/15/25 10:18*	*20*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-499414/6
Matrix: Solid
Analysis Batch: 499414

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			07/12/25 12:47	1
Nitrate as N	ND		0.10		mg/L			07/12/25 12:47	1

Lab Sample ID: LCS 180-499414/7
Matrix: Solid
Analysis Batch: 499414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	50.6		mg/L		101	80 - 120
Nitrate as N	2.50	2.61		mg/L		104	80 - 120

Lab Sample ID: 180-193071-C-1 MS
Matrix: Solid
Analysis Batch: 499414

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	35		50.0	82.8		mg/L		96	80 - 120
Nitrate as N	ND		2.50	2.63		mg/L		105	80 - 120

Lab Sample ID: 180-193071-C-1 MSD
Matrix: Solid
Analysis Batch: 499414

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	35		50.0	82.9		mg/L		96	80 - 120	0	15
Nitrate as N	ND		2.50	2.64		mg/L		106	80 - 120	0	15

Lab Sample ID: LB 180-499275/1-A
Matrix: Solid
Analysis Batch: 499414

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			07/12/25 16:40	1
Nitrate as N	ND		0.10		mg/L			07/12/25 16:40	1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-672350/1-A
Matrix: Solid
Analysis Batch: 672711

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672350

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.50		mg/L		07/16/25 22:00	07/17/25 09:00	1

Lab Sample ID: LCS 410-672350/2-A
Matrix: Solid
Analysis Batch: 672711

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	5.00	5.06		mg/L		101	83 - 119

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 180-192771-A-1-G MS
Matrix: Solid
Analysis Batch: 672711

Client Sample ID: Matrix Spike
Prep Type: TCLP
Prep Batch: 672350

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND		5.00	4.74		mg/L		90	75 - 125

Lab Sample ID: 180-192771-A-1-H MSD
Matrix: Solid
Analysis Batch: 672711

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP
Prep Batch: 672350

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	ND		5.00	4.54		mg/L		86	75 - 125	4	20

Lab Sample ID: 180-192771-A-1-F DU
Matrix: Solid
Analysis Batch: 672711

Client Sample ID: Duplicate
Prep Type: TCLP
Prep Batch: 672350

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	ND		ND		mg/L		NC	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-672350/1-A
Matrix: Solid
Analysis Batch: 672976

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672350

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.25		mg/L		07/16/25 22:00	07/17/25 17:42	1
Arsenic	ND		0.020		mg/L		07/16/25 22:00	07/17/25 17:42	1
Barium	ND		0.020		mg/L		07/16/25 22:00	07/17/25 17:42	1
Cadmium	ND		0.0050		mg/L		07/16/25 22:00	07/17/25 17:42	1
Chromium	ND		0.020		mg/L		07/16/25 22:00	07/17/25 17:42	1
Copper	ND		0.010		mg/L		07/16/25 22:00	07/17/25 17:42	1
Silver	0.00546	B	0.0050		mg/L		07/16/25 22:00	07/17/25 17:42	1
Molybdenum	ND		0.0050		mg/L		07/16/25 22:00	07/17/25 17:42	1
Nickel	ND		0.010		mg/L		07/16/25 22:00	07/17/25 17:42	1
Lead	ND		0.0050		mg/L		07/16/25 22:00	07/17/25 17:42	1
Antimony	ND		0.010		mg/L		07/16/25 22:00	07/17/25 17:42	1
Selenium	ND		0.010		mg/L		07/16/25 22:00	07/17/25 17:42	1
Zinc	ND		0.10		mg/L		07/16/25 22:00	07/17/25 17:42	1

Lab Sample ID: LCS 410-672350/2-A
Matrix: Solid
Analysis Batch: 672976

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672350

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	50.0	49.5		mg/L		99	83 - 114
Arsenic	5.00	5.09		mg/L		102	86 - 111
Barium	5.00	5.16		mg/L		103	86 - 114
Cadmium	0.500	0.510		mg/L		102	86 - 114
Chromium	5.00	5.02		mg/L		100	84 - 113
Copper	5.00	5.08		mg/L		102	86 - 111
Silver	0.500	0.510		mg/L		102	86 - 116
Molybdenum	0.500	0.511		mg/L		102	83 - 115

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-672350/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total Recoverable**
Analysis Batch: 672976 — **Prep Batch: 672350**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nickel	5.00	5.02		mg/L		100	85 - 113
Lead	0.500	0.507		mg/L		101	88 - 114
Antimony	1.00	1.02		mg/L		102	85 - 115
Selenium	1.00	1.05		mg/L		105	86 - 111
Zinc	5.00	5.13		mg/L		103	88 - 112

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-672352/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 672933 — **Prep Batch: 672352**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		07/16/25 23:45	07/17/25 17:15	1

Lab Sample ID: LCS 410-672352/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 672933 — **Prep Batch: 672352**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00100	0.000892		mg/L		89	80 - 120

Lab Sample ID: 180-192771-A-1-K MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 672933 — **Prep Batch: 672352**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	FL F2	0.0200	0.0186		mg/L		93	80 - 120

Lab Sample ID: 180-192771-A-1-L MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 672933 — **Prep Batch: 672352**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	FL F2	0.0200	0.0135	FL F2	mg/L		68	80 - 120	32	20

Lab Sample ID: 180-192771-A-1-J DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: TCLP**
Analysis Batch: 672933 — **Prep Batch: 672352**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND	FL F2	ND		mg/L		NC	20

Method: 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 410-672981/1 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 672981

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Flashpoint	127	135		Degrees F		106	90 - 110

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Method: 1010B - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCSD 410-672981/2 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 672981

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Flashpoint	127	132		Degrees F		104	90 - 110	2	4

Method: 350.1_GD - Ammonia by Gas Diffusion

Lab Sample ID: MB 180-499510/17 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			07/14/25 11:34	1

Lab Sample ID: LCS 180-499510/49 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	0.500	0.547		mg/L		109	90 - 110

Lab Sample ID: 180-192048-E-2 MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia, distilled	2.6	4	0.500	2.54	4	mg/L		-8	90 - 110

Lab Sample ID: 180-192048-E-2 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499510

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia, distilled	2.6	4	0.500	3.04	4	mg/L		92	90 - 110	18	20

Lab Sample ID: LB 180-499067/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499510

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			07/14/25 11:44	1

Lab Sample ID: LB 180-499275/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499510

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia, distilled	ND		0.10		mg/L			07/14/25 11:50	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Method: 410.4 - COD

Lab Sample ID: MB 410-672558/4
Matrix: Solid
Analysis Batch: 672558

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75		mg/L			07/17/25 09:39	1

Lab Sample ID: LCS 410-672558/5
Matrix: Solid
Analysis Batch: 672558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	500	476		mg/L		95	90 - 110

Lab Sample ID: 410-232378-F-1 MS
Matrix: Solid
Analysis Batch: 672558

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	ND		400	382		mg/L		95	90 - 110

Lab Sample ID: 410-232378-F-1 DU
Matrix: Solid
Analysis Batch: 672558

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	ND		ND		mg/L		NC	10

Lab Sample ID: LB 410-671378/1-B
Matrix: Solid
Analysis Batch: 672558

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		75		mg/L			07/17/25 09:39	1

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 410-674345/1-A
Matrix: Solid
Analysis Batch: 675055

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674345

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	ND		90		mg/Kg		07/22/25 07:07	07/22/25 18:46	1

Lab Sample ID: LCS 410-674345/25-A
Matrix: Solid
Analysis Batch: 675055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674345

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	1000	41.8	J	mg/Kg		4	0 - 5.14

Method: 9012 - Cyanide, Reactive (Continued)

Lab Sample ID: 410-231300-K-1-D MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675055 — **Prep Batch: 674345**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	ND		965	ND		mg/Kg		2	0 - 44

Lab Sample ID: 410-231300-K-1-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675055 — **Prep Batch: 674345**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Reactive	ND		997	ND		mg/Kg		2	0 - 44	3	11

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 410-674345/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674538 — **Prep Batch: 674345**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	ND		160		mg/Kg		07/22/25 07:07	07/22/25 10:47	1

Lab Sample ID: LCS 410-674345/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674538 — **Prep Batch: 674345**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	539	397		mg/Kg		74	54 - 104

Lab Sample ID: 410-231300-K-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674538 — **Prep Batch: 674345**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	ND		559	463		mg/Kg		69	62 - 104

Lab Sample ID: 410-231300-K-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674538 — **Prep Batch: 674345**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide, Reactive	ND		531	487		mg/Kg		77	62 - 104	5	21

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 240-663582/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 663637 — **Prep Batch: 663582**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		30		mg/Kg		07/14/25 07:33	07/14/25 09:56	1

Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

Lab Sample ID: LCS 240-663582/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 663637 — **Prep Batch: 663582**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	80.2	70.8		mg/Kg		88	56 - 120

Lab Sample ID: 240-228621-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 663637 — **Prep Batch: 663582**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	ND		88.2	51.5		mg/Kg	☼	58	10 - 143

Lab Sample ID: 240-228621-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 663637 — **Prep Batch: 663582**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	ND		89.0	60.8		mg/Kg	☼	68	10 - 143	17	25

Method: EPA 9014 - Cyanide

Lab Sample ID: MB 180-499395/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499428 — **Prep Batch: 499395**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.50		mg/Kg		07/11/25 13:17	07/12/25 09:07	1

Lab Sample ID: HLCS 180-499395/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499428 — **Prep Batch: 499395**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.252		mg/Kg		101	90 - 110

Lab Sample ID: LCS 180-499395/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499428 — **Prep Batch: 499395**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	26.0	24.1		mg/Kg		93	17 - 163

Lab Sample ID: LLCS 180-499395/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499428 — **Prep Batch: 499395**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.0500	0.0527		mg/Kg		105	90 - 110

Method: EPA 9014 - Cyanide (Continued)

Lab Sample ID: 180-192861-C-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499428 — **Prep Batch: 499395**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.21		3.56	3.08		mg/Kg	☼	81	75 - 125

Lab Sample ID: 180-192861-C-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499428 — **Prep Batch: 499395**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	0.21		3.74	3.24		mg/Kg	☼	81	75 - 125	5	20

Lab Sample ID: MB 180-499811/4-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499854 — **Prep Batch: 499811**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		07/18/25 11:51	07/18/25 16:51	1

Lab Sample ID: HLCS 180-499811/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499854 — **Prep Batch: 499811**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	250	249		ug/L		100	90 - 110

Lab Sample ID: LCS 180-499811/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499854 — **Prep Batch: 499811**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	200	180		ug/L		90	85 - 115

Lab Sample ID: LLCS 180-499811/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499854 — **Prep Batch: 499811**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	50.0	49.4		ug/L		99	90 - 110

Lab Sample ID: LB 180-499275/1-B — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499854 — **Prep Batch: 499811**

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		10		ug/L		07/18/25 11:51	07/18/25 18:18	1

Lab Sample ID: 180-192851-A-1-H MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499854 — **Prep Batch: 499811**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND		200	193		ug/L		96	75 - 125

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Method: EPA 9014 - Cyanide

Lab Sample ID: 180-192851-A-1-I MSD
Matrix: Solid
Analysis Batch: 499854

Client Sample ID: Matrix Spike Duplicate
Prep Type: ASTM Leach
Prep Batch: 499811

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND		200	193		ug/L		96	75 - 125	0	20

Lab Sample ID: 180-192851-A-1-G DU
Matrix: Solid
Analysis Batch: 499854

Client Sample ID: Duplicate
Prep Type: ASTM Leach
Prep Batch: 499811

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Cyanide, Total	ND			ND		ug/L				NC	20

Method: EPA 9040C - pH

Lab Sample ID: LCS 180-499412/1
Matrix: Solid
Analysis Batch: 499412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			7.00	7.0		SU		100	99 - 101		

Lab Sample ID: LB 180-499275/1-A
Matrix: Solid
Analysis Batch: 499412

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.4		0.1		SU			07/11/25 17:22	1
Temperature	25.5		0.1		Degrees C			07/11/25 17:22	1

Method: EPA 9095B - Paint Filter

Lab Sample ID: 180-192851-B-1 DU
Matrix: Solid
Analysis Batch: 499326

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Free Liquid	CNF			CNF		NONE				NC	20

Method: SM 2540B - Total Solids

Lab Sample ID: MB 180-499497/1
Matrix: Solid
Analysis Batch: 499497

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			07/14/25 13:32	1

Lab Sample ID: LCS 180-499497/2
Matrix: Solid
Analysis Batch: 499497

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Solids			252	222		mg/L		88	85 - 115		

Method: SM 2540B - Total Solids (Continued)

Lab Sample ID: LCSD 180-499497/3 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499497

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Solids			252	232		mg/L		92	85 - 115	4	20

Lab Sample ID: LB 180-499275/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499497

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	ND		10		mg/L			07/14/25 13:32	1

Method: SM 2540E - Solids, Volatile and Fixed (VS)

Lab Sample ID: MB 180-499549/1 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			07/14/25 13:32	1

Lab Sample ID: LB 180-499275/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: ASTM Leach**
Analysis Batch: 499549

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Volatile Solids	ND		10		mg/L			07/14/25 13:32	1

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-192851-B-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499291

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	72		72.0		%		0.4	10
Total Volatile Solids	0.93		1.00		%		7	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

GC/MS VOA

Leach Batch: 672618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	1311	
180-192851-I-1-C MS	Matrix Spike	TCLP	Solid	1311	
180-192851-I-1-C MSD	Matrix Spike Duplicate	TCLP	Solid	1311	

Analysis Batch: 673750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	8260D	672618
MB 410-673750/7	Method Blank	Total/NA	Solid	8260D	
LCS 410-873750/4	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-873750/5	Lab Control Sample Dup	Total/NA	Solid	8260D	
180-192851-I-1-C MS	Matrix Spike	TCLP	Solid	8260D	672618
180-192851-I-1-C MSD	Matrix Spike Duplicate	TCLP	Solid	8260D	672618

GC/MS Semi VOA

Leach Batch: 499274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	EPA 1311	
LB 180-499274/1-D	Method Blank	TCLP	Solid	EPA 1311	

Prep Batch: 499325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	3541	
MB 180-499325/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-499325/2-A	Lab Control Sample	Total/NA	Solid	3541	
180-192851-D-1-B MS	Matrix Spike	Total/NA	Solid	3541	
180-192851-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3541	

Analysis Batch: 499353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	EPA 8270E	499325
MB 180-499325/1-A	Method Blank	Total/NA	Solid	EPA 8270E	499325
LCS 180-499325/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	499325
180-192851-D-1-B MS	Matrix Spike	Total/NA	Solid	EPA 8270E	499325
180-192851-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 8270E	499325

Prep Batch: 499422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	3510C	499274
LB 180-499274/1-D	Method Blank	TCLP	Solid	3510C	499274
MB 180-499422/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-499422/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-499422/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 499453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	EPA 8270E	499422
LB 180-499274/1-D	Method Blank	TCLP	Solid	EPA 8270E	499422
MB 180-499422/1-A	Method Blank	Total/NA	Solid	EPA 8270E	499422
LCS 180-499422/2-A	Lab Control Sample	Total/NA	Solid	EPA 8270E	499422
LCSD 180-499422/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8270E	499422

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

GC Semi VOA

Prep Batch: 499261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	3541	
MB 180-499261/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-499261/2-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-499261/3-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Leach Batch: 499274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	EPA 1311	
LB 180-499274/1-B	Method Blank	TCLP	Solid	EPA 1311	
LB 180-499274/1-C	Method Blank	TCLP	Solid	EPA 1311	

Analysis Batch: 499378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	EPA 8081B	499261
MB 180-499261/1-A	Method Blank	Total/NA	Solid	EPA 8081B	499261
LCS 180-499261/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	499261
LCSD 180-499261/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	499261

Prep Batch: 499420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	8151A	499274
LB 180-499274/1-B	Method Blank	TCLP	Solid	8151A	499274
MB 180-499420/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-499420/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-499420/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Prep Batch: 499421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	3510C	499274
LB 180-499274/1-C	Method Blank	TCLP	Solid	3510C	499274
MB 180-499421/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 180-499421/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 180-499421/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Prep Batch: 499439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	8151A	
MB 180-499439/1-A	Method Blank	Total/NA	Solid	8151A	
LCS 180-499439/2-A	Lab Control Sample	Total/NA	Solid	8151A	
LCSD 180-499439/3-A	Lab Control Sample Dup	Total/NA	Solid	8151A	

Analysis Batch: 499458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	EPA 8081B	499421
LB 180-499274/1-C	Method Blank	TCLP	Solid	EPA 8081B	499421
MB 180-499421/1-A	Method Blank	Total/NA	Solid	EPA 8081B	499421
LCS 180-499421/2-A	Lab Control Sample	Total/NA	Solid	EPA 8081B	499421
LCSD 180-499421/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8081B	499421

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

GC Semi VOA

Analysis Batch: 499528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	EPA 8151A	499420
180-192857-1	250707017-07	Total/NA	Solid	EPA 8151A	499439
LB 180-499274/1-B	Method Blank	TCLP	Solid	EPA 8151A	499420
MB 180-499420/1-A	Method Blank	Total/NA	Solid	EPA 8151A	499420
MB 180-499439/1-A	Method Blank	Total/NA	Solid	EPA 8151A	499439
LCS 180-499420/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	499420
LCS 180-499439/2-A	Lab Control Sample	Total/NA	Solid	EPA 8151A	499439
LCSD 180-499420/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	499420
LCSD 180-499439/3-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8151A	499439

HPLC/IC

Leach Batch: 499275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	D3987-85	
LB 180-499275/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 499414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	EPA 9056A	499275
LB 180-499275/1-A	Method Blank	ASTM Leach	Solid	EPA 9056A	499275
MB 180-499414/8	Method Blank	Total/NA	Solid	EPA 9056A	
LCS 180-499414/7	Lab Control Sample	Total/NA	Solid	EPA 9056A	
180-193071-C-1 MS	Matrix Spike	Total/NA	Solid	EPA 9056A	
180-193071-C-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9056A	

Metals

Leach Batch: 671376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	1311	
180-192771-A-1-G MS	Matrix Spike	TCLP	Solid	1311	
180-192771-A-1-H MSD	Matrix Spike Duplicate	TCLP	Solid	1311	
180-192771-A-1-K MS	Matrix Spike	TCLP	Solid	1311	
180-192771-A-1-L MSD	Matrix Spike Duplicate	TCLP	Solid	1311	
180-192771-A-1-F DU	Duplicate	TCLP	Solid	1311	
180-192771-A-1-J DU	Duplicate	TCLP	Solid	1311	

Prep Batch: 672350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	3005A	671376
MB 410-672350/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 410-672350/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
180-192771-A-1-G MS	Matrix Spike	TCLP	Solid	3005A	671376
180-192771-A-1-H MSD	Matrix Spike Duplicate	TCLP	Solid	3005A	671376
180-192771-A-1-F DU	Duplicate	TCLP	Solid	3005A	671376

Prep Batch: 672352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	7470A	671376
MB 410-672352/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 410-672352/2-A	Lab Control Sample	Total/NA	Solid	7470A	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

Metals (Continued)

Prep Batch: 672352 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192771-A-1-K MS	Matrix Spike	TCLP	Solid	7470A	671376
180-192771-A-1-L MSD	Matrix Spike Duplicate	TCLP	Solid	7470A	671376
180-192771-A-1-J DU	Duplicate	TCLP	Solid	7470A	671376

Analysis Batch: 672711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	6010D	672350
MB 410-672350/1-A	Method Blank	Total Recoverable	Solid	6010D	672350
LCS 410-672350/2-A	Lab Control Sample	Total Recoverable	Solid	6010D	672350
180-192771-A-1-G MS	Matrix Spike	TCLP	Solid	6010D	672350
180-192771-A-1-H MSD	Matrix Spike Duplicate	TCLP	Solid	6010D	672350
180-192771-A-1-F DU	Duplicate	TCLP	Solid	6010D	672350

Analysis Batch: 672933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	7470A	672352
MB 410-672352/1-A	Method Blank	Total/NA	Solid	7470A	672352
LCS 410-672352/2-A	Lab Control Sample	Total/NA	Solid	7470A	672352
180-192771-A-1-K MS	Matrix Spike	TCLP	Solid	7470A	672352
180-192771-A-1-L MSD	Matrix Spike Duplicate	TCLP	Solid	7470A	672352
180-192771-A-1-J DU	Duplicate	TCLP	Solid	7470A	672352

Analysis Batch: 672976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	TCLP	Solid	6020B	672350
MB 410-672350/1-A	Method Blank	Total Recoverable	Solid	6020B	672350
LCS 410-672350/2-A	Lab Control Sample	Total Recoverable	Solid	6020B	672350

General Chemistry

Leach Batch: 499067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-499067/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Leach Batch: 499275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	D3987-85	
LB 180-499275/1-A	Method Blank	ASTM Leach	Solid	D3987-85	
LB 180-499275/1-B	Method Blank	ASTM Leach	Solid	D3987-85	
180-192851-A-1-H MS	Matrix Spike	ASTM Leach	Solid	D3987-85	
180-192851-A-1-I MSD	Matrix Spike Duplicate	ASTM Leach	Solid	D3987-85	
180-192851-A-1-G DU	Duplicate	ASTM Leach	Solid	D3987-85	

Analysis Batch: 499291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	SM 2540G	
180-192851-B-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

Analysis Batch: 499326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	EPA 9095B	

General Chemistry (Continued)

Analysis Batch: 499326 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192851-B-1 DU	Duplicate	Total/NA	Solid	EPA 9095B	

Prep Batch: 499395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	9010C	
MB 180-499395/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-499395/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-499395/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-499395/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-192861-C-1-B MS	Matrix Spike	Total/NA	Solid	9010C	
180-192861-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	9010C	

Analysis Batch: 499412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	EPA 9040C	499275
LB 180-499275/1-A	Method Blank	ASTM Leach	Solid	EPA 9040C	499275
LCS 180-499412/1	Lab Control Sample	Total/NA	Solid	EPA 9040C	

Analysis Batch: 499428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	EPA 9014	499395
MB 180-499395/4-A	Method Blank	Total/NA	Solid	EPA 9014	499395
HLCS 180-499395/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499395
LCS 180-499395/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499395
LLCS 180-499395/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499395
180-192861-C-1-B MS	Matrix Spike	Total/NA	Solid	EPA 9014	499395
180-192861-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	EPA 9014	499395

Analysis Batch: 499497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	SM 2540B	499275
LB 180-499275/1-A	Method Blank	ASTM Leach	Solid	SM 2540B	499275
MB 180-499497/1	Method Blank	Total/NA	Solid	SM 2540B	
LCS 180-499497/2	Lab Control Sample	Total/NA	Solid	SM 2540B	
LCSD 180-499497/3	Lab Control Sample Dup	Total/NA	Solid	SM 2540B	

Analysis Batch: 499510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	350.1_GD	499275
LB 180-499067/1-A	Method Blank	ASTM Leach	Solid	350.1_GD	499067
LB 180-499275/1-A	Method Blank	ASTM Leach	Solid	350.1_GD	499275
MB 180-499510/17	Method Blank	Total/NA	Solid	350.1_GD	
LCS 180-499510/49	Lab Control Sample	Total/NA	Solid	350.1_GD	
180-192048-E-2 MS	Matrix Spike	Total/NA	Solid	350.1_GD	
180-192048-E-2 MSD	Matrix Spike Duplicate	Total/NA	Solid	350.1_GD	

Analysis Batch: 499549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	SM 2540E	499275
LB 180-499275/1-A	Method Blank	ASTM Leach	Solid	SM 2540E	499275
MB 180-499549/1	Method Blank	Total/NA	Solid	SM 2540E	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

General Chemistry

Prep Batch: 499811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	9010C	499275
LB 180-499275/1-B	Method Blank	ASTM Leach	Solid	9010C	499275
MB 180-499811/4-A	Method Blank	Total/NA	Solid	9010C	
HLCS 180-499811/2-A	Lab Control Sample	Total/NA	Solid	9010C	
LCS 180-499811/3-A	Lab Control Sample	Total/NA	Solid	9010C	
LLCS 180-499811/1-A	Lab Control Sample	Total/NA	Solid	9010C	
180-192851-A-1-H MS	Matrix Spike	ASTM Leach	Solid	9010C	499275
180-192851-A-1-I MSD	Matrix Spike Duplicate	ASTM Leach	Solid	9010C	499275
180-192851-A-1-G DU	Duplicate	ASTM Leach	Solid	9010C	499275

Analysis Batch: 499854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	EPA 9014	499811
LB 180-499275/1-B	Method Blank	ASTM Leach	Solid	EPA 9014	499811
MB 180-499811/4-A	Method Blank	Total/NA	Solid	EPA 9014	499811
HLCS 180-499811/2-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499811
LCS 180-499811/3-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499811
LLCS 180-499811/1-A	Lab Control Sample	Total/NA	Solid	EPA 9014	499811
180-192851-A-1-H MS	Matrix Spike	ASTM Leach	Solid	EPA 9014	499811
180-192851-A-1-I MSD	Matrix Spike Duplicate	ASTM Leach	Solid	EPA 9014	499811
180-192851-A-1-G DU	Duplicate	ASTM Leach	Solid	EPA 9014	499811

Prep Batch: 663582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	9030B	
MB 240-663582/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 240-663582/2-A	Lab Control Sample	Total/NA	Solid	9030B	
240-228621-A-1-B MS	Matrix Spike	Total/NA	Solid	9030B	
240-228621-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	9030B	

Analysis Batch: 663637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	9034	663582
MB 240-663582/1-A	Method Blank	Total/NA	Solid	9034	663582
LCS 240-663582/2-A	Lab Control Sample	Total/NA	Solid	9034	663582
240-228621-A-1-B MS	Matrix Spike	Total/NA	Solid	9034	663582
240-228621-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	9034	663582

Leach Batch: 671378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	D3987-85	
LB 410-671378/1-B	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 672558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	ASTM Leach	Solid	410.4	671378
LB 410-671378/1-B	Method Blank	ASTM Leach	Solid	410.4	671378
MB 410-872558/4	Method Blank	Total/NA	Solid	410.4	
LCS 410-672558/5	Lab Control Sample	Total/NA	Solid	410.4	
410-232378-F-1 MS	Matrix Spike	Total/NA	Solid	410.4	
410-232378-F-1 DU	Duplicate	Total/NA	Solid	410.4	

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192857-1
SDG: 250707017

General Chemistry

Analysis Batch: 672981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	1010B	
LCS 410-672981/1	Lab Control Sample	Total/NA	Solid	1010B	
LCSD 410-672981/2	Lab Control Sample Dup	Total/NA	Solid	1010B	

Prep Batch: 674345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	7.3.4	
MB 410-674345/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 410-674345/25-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCS 410-674345/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
410-231300-K-1-B MS	Matrix Spike	Total/NA	Solid	7.3.4	
410-231300-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.4	
410-231300-K-1-D MS	Matrix Spike	Total/NA	Solid	7.3.4	
410-231300-K-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7.3.4	

Analysis Batch: 674538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	9034	674345
MB 410-674345/1-A	Method Blank	Total/NA	Solid	9034	674345
LCS 410-674345/2-A	Lab Control Sample	Total/NA	Solid	9034	674345
410-231300-K-1-B MS	Matrix Spike	Total/NA	Solid	9034	674345
410-231300-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	9034	674345

Analysis Batch: 675055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192857-1	250707017-07	Total/NA	Solid	9012	674345
MB 410-674345/1-A	Method Blank	Total/NA	Solid	9012	674345
LCS 410-674345/25-A	Lab Control Sample	Total/NA	Solid	9012	674345
410-231300-K-1-D MS	Matrix Spike	Total/NA	Solid	9012	674345
410-231300-K-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	9012	674345

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250707017**

Additional Information : Quarterly Unlimed Sludge

Sample composited on July 7 from grabs collected on July 1, July 2, July 3, July 4, July 6, July 7

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: See attached Parameter List	See attached Parameter List	See attached Parameter List	See attached Parameter List		
							Number of Containers					
250707017-07	7/7/25	0604	S	N	C	Always maintain sample/extract at	2	4	2	1		
						25°C when reading any pH result.						
						Solids must be analyzed by 2540G.						
						All methods must be accredited by						
						PADEP or NELAC.						
						Email a copy of LIMS login with signed						
						COC as soon as possible after receipt.						
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-192857 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	07-08-25	1525		EUROFINS	7-8-25	1525
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	EPTIMS	7-8-25	1730		EPTIMS	7/8/25	1730
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: _____ Date: 7-8-25

Supervisor Review: Initials: SY Date: 7 7 25

Page 1 of 1

Contract Lab ONLY Quarterly Analysis, includes **Unlimed Sludge** (one quarter per year)

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM , LIMED SLUDGE & UNLIMED SLUDGE- ONE QUARTER PER YEAR (all sent to outside lab)			
COMPOSITE (2 Clear Quarts + 4 Amber half pints + 2 pints)			
7 days of a Grab sample to generate a Composite* (minimum 6 grabs) Each sample matrix is analyzed for all parameters listed. ---------- NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlimed sludge is included, analyses are performed by contract laboratory(s) only- **see Residuals for which quarter.** **Check reporting limit requirments.**	Quarterly	**ASTM EXTRACTION (LIQUID)** pH(SW-846 9040C) / Nitrate-Nitrogen / NH3-N pH Temp(SW-846 9040C) / Cyanide, Total / Total Sulfates Total Solids / COD Total Volatile Solids **TCLP EXTRACTION (LIQUID)** TCLP METALS / Antimony / Herbicides Aluminum / Boron Arsenic / Copper / Pesticides Barium / Molybdenum / Chlordane Cadmium / Nickel / Toxaphene Chromium / Zinc / 8270 BNA Lead / Silver / 8260 Volatile Organics (ZHF) Mercury Selenium **MISCELLANEOUS (SOLID)** Herbicides Pesticides Heptachlor/Hep Epoxide Chlordane Toxaphene Cyanide, Total Total Sulfide Paint Filter Test Ignitability 8270 BNA Total Solids (SM2540G) Total Volatile Solids (SM2540G)# **COMPOSITE (Half Pint) Lancaster Lab** Reactive Cyanide Reactive Sulfide # Not logged in separately from Solids, Total	Laboratory

Red indicates analyses performed by a contract laboratory

SEND 2 FULL CLEAR QUARTS + 4 AMBER 1/2 PINTS + 2 PINTS + ONE HALF PINT OF COMPOSITE

Login ASTM as test group "ASTM Extraction (liquid)"

Alcosan #20 -0.8

J11	2.3	1.5
J12	2.5	1.7

180-192857 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-541886.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP Pennsylvania		Job #: 180-192857-1
Address: 180 S. Van Buren Avenue,	Due Date Requested: 7/21/2025			Preservation Codes:
City: Barberton	TAT Requested (days): N/A			
State, Zip: OH 44203				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Unlimed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

E041

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9034_Calc/9030BSulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
250707017-07 (180-192857-1)	7/7/25	06:04 Eastern	G	Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification Unconfirmed			*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months		
Deliverable Requested: I II III, IV Other (specify)	Primary Deliverable Rank: 2		Special Instructions/QC Requirements:		
Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:	
Relinquished by: [signature]	Date/Time: 7/10/25 1500	Company: EUSAW	Received by: JLM	Date/Time: 7/11/25 0900	Company: EUB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.		Cooler Temperature(s) °C and Other Remarks:		

Ver 10/10/2024 7/23/2025

7/23/2025

Eurofins - Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Eurofins Pittsburgh Site Name _____ Cooler unpacked by: JM

Cooler Received on 7/11/25 Opened on 7/11/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

Receipt After-hours Drop-off Date/Time _____ Storage Location _____

Eurofins Cooler # EC Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1 Cooler temperature upon receipt ☑ See Multiple Cooler Form

IR GUN # 13 (CF +.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   - Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   - Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC? Yes No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp (Y/N)?
10. Were correct bottle(s) used for the test(s) indicated? Yes No
11. Sufficient quantity received to perform indicated analyses? Yes No
12. Are these work share samples and all listed on the COC? Yes No
    If yes, Questions 13-17 have been checked at the originating laboratory
13. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC463162
14. Were VOAs on the COC? Yes No
15. Were air bubbles >6 mm in any VOA vials? ● ← Larger than this Yes No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
17. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Labeled by:
Labels Verified by

19 SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired

Sample(s) _____ were received in a broken container

Sample(s) _____ were received with bubble >6 mm in diameter (Notify PM)

20 SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory

Time preserved _____ Preservative(s) added/Lot number(s) _____

VOA Sample Preservation Date/Time VOAs Frozen _____

Login # ______________

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.6	1.1	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: ✓	3.0	3.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.9	1.4	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
			☐ See Temperature Excursion Form	

2 of 3

MPS# 0253 4642 5777 3663

Mstr# 4642 5777 3652

0201

FRI - 11 JUL 10:30A

PRIORITY OVERNIGHT

64 CAKA

44203

OH-US CLE

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-541914.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-192857-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 7/21/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Unlined Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil, Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	410.4/ASTM_LEACH_NP	6020B/1311T_M(MOD) TCLP Quarterly Metals List	7470A/1311T_HgMercury	6010D/1311T_M(MOD) TCLP Boron	9012_ReactiveCN/7.3.3	9034_ReactiveS/7.3.4	1010Ignitability, Pensky-Martens Closed-Cup	8260D/1311_ZTCLP Volatiles + Naphthalene	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X									X	
250707017-07 (180-192857-1)	7/7/25	06:04 Eastern	G	Solid			X	X	X	X	X	X	X	X	1	DO NOT Overdilute; low limits required

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: AR	Date/Time: 7-10-25 1300	Company: ESP+WG	Received by:		Date/Time: 7-10-25 14:70	Company: ECLE	
Relinquished by:	Date/Time: 7-10-25 19:45	Company: ECLE	Received by:		Date/Time:	Company:	
Relinquished by:	Date/Time:	Company:	Received by:		Date/Time: 7/10/25 1445	Company: ECCET	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		5.6/5.6		

Ver: 10/10/2024

7/23/2025

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-541947.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-192857-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 7/21/2025			
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Unlimed Sludge	Project #: 16007110			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	410.4/ASTM_LEACH_NP	6020B/1311T_M(MOD) TCLP Quarterly Metals List	7470A/1311T_HgMercury	6010D/1311T_M(MOD) TCLP Boron	9012_ReactiveCN/7.3.3	9034_ReactiveS/7.3.4	1010Ignitability, Pensky-Marteus Closed-Cup	8260D/1311_ZTCLP Volatiles + Naphthalene	Total Number of Containers	Special Instructions/Note:
			Preservation Code:													
250707017-07 (180-192857-1)	7/7/25	06:04 Eastern	G	Solid			X	X	X	X	X	X	X	X	2	DO NOT Overdilute; low limits required

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:		Method of Shipment:	
Relinquished by:	Date/Time: 7/11/25 1300	Company:	Received by:	Date/Time: 7/11/25 1400	Company: ELLE
Relinquished by:	Date/Time: 7/11/25 1910	Company: ELLE	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 7/11/25 1910	Company: ELLE
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.1/2.1		

Ver: 10/10/2024

7/23/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192857-1
SDG Number: 250707017

Login Number: 192857
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192857-1
SDG Number: 250707017

Login Number: 192857
List Number: 2
Creator: McCaskey, Jonathan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/11/25 02:16 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as e subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250707018 **Sample Date:** 7/7/2025

Sample ID Number: 250707018-01 **Sample Type:** COMPOSITE

Customer Sample Number: METALS COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Contract Lab								
Thallium	Contract Lab	EurofinsLancaster	7/23/2025	0.32	mg/kg dry	0.30		
Total Sulfur	Contract Lab	EurofinsLancaster	7/23/2025	7200	mg/kg dry	150		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/10/2025	31	%	0.50		
Metals								
Antimony	Contract Lab	EurofinsLancaster	7/23/2025	2.6	mg/kg dry	0.59		
Arsenic	Contract Lab	EurofinsLancaster	7/23/2025	13	mg/kg dry	1.2		
Barium	Contract Lab	EurofinsLancaster	7/23/2025	480	mg/kg dry	1.2		
Beryllium	Contract Lab	EurofinsLancaster	7/23/2025	1.3	mg/kg dry	0.30		
Boron	Contract Lab	EurofinsLancaster	7/23/2025	<59	mg/kg dry	59		
Cadmium	Contract Lab	EurofinsLancaster	7/23/2025	1.5	mg/kg dry	0.30		
Chromium	Contract Lab	EurofinsLancaster	7/23/2025	62	mg/kg dry	1.2		
Copper	Contract Lab	EurofinsLancaster	7/23/2025	320	mg/kg dry	1.2		
Lead	Contract Lab	EurofinsLancaster	7/23/2025	83	mg/kg dry	0.59		
Mercury, Total	Contract Lab	EurofinsLancaster	7/22/2025	0.68	mg/kg dry	0.19		
Molybdenum	Contract Lab	EurofinsLancaster	7/23/2025	14	mg/kg dry	0.59		

Printed Date
Monday, August 11, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250707018 **Sample Date:** 7/7/2025

Sample ID Number: 250707018-01 **Sample Type:** COMPOSITE

Customer Sample Number: METALS COMPOSITE

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Nickel	Contract Lab	EurofinsLancaster	7/23/2025	43	mg/kg dry	1.2		
Selenium	Contract Lab	EurofinsLancaster	7/23/2025	4.3	mg/kg dry	1.2		
Silver	Contract Lab	EurofinsLancaster	7/23/2025	2.2	mg/kg dry	0.30		
Sodium	Contract Lab	EurofinsLancaster	7/23/2025	570	mg/kg dry	150		
Zinc	Contract Lab	EurofinsLancaster	7/23/2025	740	mg/kg dry	89		

Data Qualifier **Data Qualifier Description**

Comments:

Sample composited on July 7 from grabs collected on July 1, July 2, July 3, July 4, July 6, July 7.

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

8-11-25

Date

Printed Date
Monday, August 11, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 7/24/2025 8:18:41 AM

JOB DESCRIPTION

Quarterly Unlimed Sludge
250707018

JOB NUMBER

180-192858-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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Authorized for release by
Shali Brown, Project Manager II
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Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 11
QC Association Summary 14
Chain of Custody 16
Receipt Checklists 20

Job Narrative
180-192858-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 7/8/2025 5:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5°C and 1.7°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

Metals
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Qualifiers

Metals

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both aample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptiva
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-192858-1	250707018-01	Solid	07/07/25 06:04	07/08/25 17:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7471B	Mercury (CVAA)	SW846	ELLE
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3050B	Preparation, Metals	SW846	ELLE
7471B	Preparation, Mercury	SW846	ELLE

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Client Sample ID: 250707018-01 **Lab Sample ID: 180-192858-1**
Date Collected: 07/07/25 06:04 **Matrix: Solid**
Date Received: 07/08/25 17:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			499291	07/10/25 11:11	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250707018-01 **Lab Sample ID: 180-192858-1**
Date Collected: 07/07/25 06:04 **Matrix: Solid**
Date Received: 07/08/25 17:30 **Percent Solids: 31.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	100 mL	674819	07/22/25 21:30	UAMX	ELLE
Total/NA	Analysis	6010D		1			675538	07/23/25 23:00	MT26	ELLE
	Instrument ID: T74 - 23745									
Total/NA	Prep	3050B			1.09 g	100 mL	674819	07/22/25 21:30	UAMX	ELLE
Total/NA	Analysis	6020B		2			675266	07/23/25 10:05	F7JF	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	7471B			0.60 g	100 mL	674613	07/22/25 14:00	HNC4	ELLE
Total/NA	Analysis	7471B		1			674846	07/22/25 19:58	IJ3I	ELLE
	Instrument ID: M10 – 31820									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Analysis
  - ELS = Edwin Shireman

Lab: ELLE
- Batch Type: Prep
  - HNC4 = Mindy Schantzenbach
  - UAMX = Annamaria Kuhns
- Batch Type: Analysis
  - F7JF = Dennis Dick
  - IJ3I = Elizabeth Brittingham
  - MT26 = Jason Knight

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Client Sample ID: 250707018-01
Date Collected: 07/07/25 06:04
Date Received: 07/08/25 17:30

Lab Sample ID: 180-192858-1
Matrix: Solid
Percent Solids: 31.0

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		59		mg/Kg	☼	07/22/25 21:30	07/23/25 23:00	1
Sulfur	**7200**		150		mg/Kg	☼	07/22/25 21:30	07/23/25 23:00	1

Method: SW846 6020B - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.6**		0.59		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Arsenic	**13**		1.2		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Barium	**480**		1.2		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Beryllium	**1.3**		0.30		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Cadmium	**1.5**		0.30		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Chromium	**62**		1.2		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Copper	**320**		1.2		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Lead	**83**		0.59		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Molybdenum	**14**		0.59		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Nickel	**43**		1.2		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Selenium	**4.3**		1.2		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Silver	**2.2**		0.30		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Sodium	**570**		150		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Thallium	**0.32**		0.30		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2
Zinc	**740**		89		mg/Kg	☼	07/22/25 21:30	07/23/25 10:05	2

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.68**		0.19		mg/Kg	☼	07/22/25 14:00	07/22/25 19:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	**31**		0.50		%			07/10/25 11:11	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 410-674819/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675538 — **Prep Batch: 674819**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		20		mg/Kg		07/22/25 21:30	07/23/25 22:07	1
Sulfur	ND		50		mg/Kg		07/22/25 21:30	07/23/25 22:07	1

Lab Sample ID: LCS 410-674819/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675538 — **Prep Batch: 674819**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	50.0	49.7		mg/Kg		99	80 - 120
Sulfur	500	483		mg/Kg		97	89 - 110

Lab Sample ID: 180-193087-C-33-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675538 — **Prep Batch: 674819**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND	F2	50.1	55.0		mg/Kg	☼	100	75 - 125
Sulfur	50	F2	501	566		mg/Kg	☼	103	75 - 125

Lab Sample ID: 180-193087-C-33-B MS ^5 — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675538 — **Prep Batch: 674819**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	ND	F2	50.1	ND		mg/Kg	☼	113	75 - 125
Sulfur	ND	F2	501	567		mg/Kg	☼	102	75 - 125

Lab Sample ID: 160-193087-C-33-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675538 — **Prep Batch: 674619**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	ND	F2	34.4	38.8	F2	mg/Kg	☼	99	75 - 125	35	20
Sulfur	50	F2	344	396	F2	mg/Kg	☼	101	75 - 125	35	20

Lab Sample ID: 180-193087-C-33-C MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675538 — **Prep Batch: 674819**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	ND	F2	34.4	ND	F2	mg/Kg	☼	122	75 - 125	30	20
Sulfur	ND	F2	344	415	F2	mg/Kg	☼	105	75 - 125	31	20

Lab Sample ID: 180-193087-D-33-C DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 675538 — **Prep Batch: 674819**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	ND	F2	ND		mg/Kg	☼	NC	20
Sulfur	50	F2	80.2	F5	mg/Kg	☼	47	20

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Method: 6010D - Metals (ICP)

Lab Sample ID: 180-193087-D-33-C DU ^5
Matrix: Solid
Analysis Batch: 675538

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 674819

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Boron	ND	F2	ND		mg/Kg	☼	NC	20
Sulfur	ND	F2	ND		mg/Kg	☼	NC	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-674819/1-A ^2
Matrix: Solid
Analysis Batch: 675266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.20		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Arsenic	ND		0.40		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Barium	ND		0.40		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Beryllium	ND		0.10		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Cadmium	ND		0.10		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Chromium	ND		0.40		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Copper	ND		0.40		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Lead	ND		0.20		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Molybdenum	ND		0.20		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Nickel	ND		0.40		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Selenium	ND		0.40		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Silver	ND		0.10		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Sodium	ND		50		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Thallium	ND		0.10		mg/Kg		07/22/25 21:30	07/23/25 09:40	2
Zinc	ND		30		mg/Kg		07/22/25 21:30	07/23/25 09:40	2

Lab Sample ID: LCS 410-674819/2-A ^2
Matrix: Solid
Analysis Batch: 675266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	10.0	9.46		mg/Kg		95	83 - 117
Arsenic	50.0	45.9		mg/Kg		92	84 - 114
Barium	50.0	47.5		mg/Kg		95	85 - 118
Beryllium	5.00	4.63		mg/Kg		93	74 - 120
Cadmium	5.00	4.79		mg/Kg		96	85 - 117
Chromium	50.0	46.6		mg/Kg		93	83 - 116
Copper	50.0	46.7		mg/Kg		93	83 - 115
Lead	5.00	4.81		mg/Kg		96	85 - 119
Molybdenum	5.00	4.85		mg/Kg		97	83 - 119
Nickel	50.0	46.3		mg/Kg		93	84 - 116
Selenium	10.0	9.26		mg/Kg		93	83 - 115
Silver	5.00	4.83		mg/Kg		97	87 - 119
Sodium	500	465		mg/Kg		93	81 - 120
Thallium	10.0	9.68		mg/Kg		97	86 - 116
Zinc	50.0	46.3		mg/Kg		93	84 - 116

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 410-674613/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674846 — **Prep Batch: 674613**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.060		mg/Kg		07/22/25 14:00	07/22/25 19:35	1

Lab Sample ID: LCS 410-674613/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674846 — **Prep Batch: 674613**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.167	0.171		mg/Kg		102	80 - 120

Lab Sample ID: 410-230581-E-4-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674846 — **Prep Batch: 674613**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.217	0.222		mg/Kg	☼	103	80 - 120

Lab Sample ID: 410-230581-E-4-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674846 — **Prep Batch: 674613**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.203	0.207		mg/Kg	☼	102	80 - 120	7	20

Lab Sample ID: 410-230581-E-4-B DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 674846 — **Prep Batch: 674613**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		mg/Kg	☼	NC	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-192651-B-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499291

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	72		72.0		%		0.4	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

Metals

Prep Batch: 674613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192858-1	250707018-01	Total/NA	Solid	7471B	
MB 410-674613/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 410-674613/2-A	Lab Control Sample	Total/NA	Solid	7471B	
410-230581-E-4-C MS	Matrix Spike	Total/NA	Solid	7471B	
410-230581-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	
410-230581-E-4-B DU	Duplicate	Total/NA	Solid	7471B	

Prep Batch: 674819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192858-1	250707018-01	Total/NA	Solid	3050B	
MB 410-674819/1-A	Method Blank	Total/NA	Solid	3050B	
MB 410-674819/1-A ^2	Method Blank	Total/NA	Solid	3050B	
LCS 410-674819/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 410-674819/2-A ^2	Lab Control Sample	Total/NA	Solid	3050B	
180-193087-C-33-B MS	Matrix Spike	Total/NA	Solid	3050B	
180-193087-C-33-B MS ^5	Matrix Spike	Total/NA	Solid	3050B	
180-193087-C-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
180-193087-C-33-C MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	3050B	
180-193087-D-33-C DU	Duplicate	Total/NA	Solid	3050B	
180-193087-D-33-C DU ^5	Duplicate	Total/NA	Solid	3050B	

Analysis Batch: 674846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192858-1	250707018-01	Total/NA	Solid	7471B	674613
MB 410-674613/1-A	Method Blank	Total/NA	Solid	7471B	674613
LCS 410-674613/2-A	Lab Control Sample	Total/NA	Solid	7471B	674613
410-230581-E-4-C MS	Matrix Spike	Total/NA	Solid	7471B	674613
410-230581-E-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	674613
410-230581-E-4-B DU	Duplicate	Total/NA	Solid	7471B	674613

Analysis Batch: 675266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192858-1	250707018-01	Total/NA	Solid	6020B	674819
MB 410-674819/1-A ^2	Method Blank	Total/NA	Solid	6020B	674819
LCS 410-674819/2-A ^2	Lab Control Sample	Total/NA	Solid	6020B	674819

Analysis Batch: 675538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192858-1	250707018-01	Total/NA	Solid	6010D	674819
MB 410-674819/1-A	Method Blank	Total/NA	Solid	6010D	674819
LCS 410-674819/2-A	Lab Control Sample	Total/NA	Solid	6010D	674819
180-193087-C-33-B MS	Matrix Spike	Total/NA	Solid	6010D	674819
180-193087-C-33-B MS ^5	Matrix Spike	Total/NA	Solid	6010D	674819
180-193087-C-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010D	674819
180-193087-C-33-C MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	6010D	674819
180-193087-D-33-C DU	Duplicate	Total/NA	Solid	6010D	674819
180-193087-D-33-C DU ^5	Duplicate	Total/NA	Solid	6010D	674819

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192858-1
SDG: 250707018

General Chemistry

Analysis Batch: 499291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192858-1	250707018-01	Total/NA	Solid	SM 2540G	
180-192851-B-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250707018**

Tests to be Performed: See attached Parameter List

Additional Information : Quarterly Unlimed Sludge

Sample composited on July 7 from grabs collected on July 1, July 2, July 3, July 4, July 6, July 7

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Number of Containers
250707018-01	7/7/25	0604	S	N	C	Always maintain sample/extract at 25°C when reading any pH result. Solids must be analyzed by 2540G. All methods must be accredited by PADEP or NELAC. Email a copy of LIMS login with signed COC as soon as possible after receipt. Report Level II data package. Document ASTM Extraction date/time And out of hold extraction on report.	1

180-192858 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[illegible]	ALCOSAN	07-08-25	1525	[illegible]	EUROFINS	7-8-25	1525
[illegible]	EPITAE	7-8-25	17:30	[illegible]	EPITAE	7/8/25	1730
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

COC Analyst Cooler Review: Initials: [illegible] Date: 7-8-25 Supervisor Review: Initials: [illegible] Date: 7 7 25

METALS

COMPOSITE Environmental Compliance Laboratory

Contract Lab ONLY Quarterly Analysis, includes **Unlimed Sludge** (one quarter per year)

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM , LIMED SLUDGE & UNLIMED SLUDGE- ONE QUARTER PER YEAR (all sent to outside lab)			
7 days of a Grab sample to generate a Composite* (mmimum 6 grabs) Each sample matrix is analyzed for all parameters listed. NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlimed sludge is included, analyses are performed by contract laboratory(s) only- **see Residuals for which quarter.** **Check reporting limit requirments.**	Quarterly	METALS ONLY COMPOSITE (Half Pint) Lancaster Lab Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, Antimony, Beryllium, Molybdenum, Nickel, Zinc, Boron Mercury, Total Sulfur (SW846 6010), Copper, Thallium, Sodium, Total Solids (SM2540G)	Laboratory

Red indicates analyses performed by a contract laboratory

SEND ONE HALF PINT OF COMPOSITE

Log metals sample, and metals TS sample, with separate LIMS ID number and add "report due by "XDATEX" on COC

Alcosan #20 -0.8

J11	2.3	1.5
J12	2.5	1.7

180-192858 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-541914.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-192858-1
Address: 2425 New Holland Pike,	Due Date Requested: 7/21/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Unlimed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Sewater, Swaqlid, Cwastaloil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B/3050BSulfur and Boron	7471B/7471B_PrepMercury	6020B/3050BQuarterly Custom Total Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
250707018-01 (180-192858-1)	7/7/25	06:04 Eastern	G	Solid			X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
AR	7-10-25 1300	EP HNC	[signature]	7-10-25 14:20	ELLE
[signature]	7-10-25 19:45	ELLE			
			[signature]	7/10/25 1445	ELLET

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.6/5.6

Ver: 10/10/2024

7/24/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192858-1
SDG Number: 250707018

Login Number: 192858
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192858-1
SDG Number: 250707018

Login Number: 192858
List Number: 2
Creator: McCaskey, Jonathan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/11/25 02:16 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250701011 **Sample Date:** 7/1/2025

Sample ID Number: 250701011-01 **Sample Type:** GRAB

Customer Sample Number: AMBER GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Chemistry								
Phenolics, Total	Contract Lab	EurofinsPittsburgh	7/8/2025	0.80	mg/kg dry	0.59		
Contract Lab								
2,3,7,8-TCDD	Contract Lab	EurofinsLancaster	7/20/2025	<2.9	pg/g Dry	2.9		
PCBs	Contract Lab	EurofinsPittsburgh	7/7/2025	See attached report	ug/Kg Dry			
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/3/2025	33	%	0.50		

Printed Date
Friday, August 15, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250701011 **Sample Date:** 7/1/2025

Sample ID Number: 250701011-01 **Sample Type:** GRAB

Customer Sample Number: AMBER GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

QUARTERLY GRABS

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Lerissa Hoard

8-15-25

Date

Printed Date
Friday, August 15, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250701011 **Sample Date:** 7/1/2025

Sample ID Number: 250701011-02 **Sample Type:** GRAB

Customer Sample Number: HEM GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
ASTM								
Hexane Extractable Material	Contract Lab	EurofinsLancaster	7/15/2025	<8.8	mg/L	8.8		
Chemistry								
Hexane Extractable Material	Contract Lab	EurofinsLancaster	7/8/2025	12000	mg/kg dry	1800		
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/3/2025	32	%	0.50		

Data Qualifier **Data Qualifier Description**

Comments:

QUARTERLY GRABS

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by:

Jessica Hawk

8-15-25

Date

Printed Date
Friday, August 15, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 7/25/2025 3:03:38 PM

JOB DESCRIPTION

Quarterly Unlimed Sludge
250701011

JOB NUMBER

180-192645-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

Generated
7/25/2025 3:03:38 PM

Authorized for release by
Shali Brown, Project Manager II
Shali.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 11
QC Sample Results 14
QC Association Summary 18
Chain of Custody 20
Receipt Checklists 24

Job Narrative
180-192645-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 7/2/2025 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C.

Volatiles were recollected.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

PCBs
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Dioxin
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
Method 1664B_NP - ASTM Leach: Elevated reporting limits are provided for the following sample due to insufficient sample from ASTM Leach due to matrix: 250701011-02 (180-192645-2).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Qualifiers

General Chemistry

Qualifier	Qualifier Description
FL	MS and/or MSD recovery below control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the raporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	07-23-25

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-192645-1	250701011-01	Solid	07/01/25 06:57	07/02/25 15:00
180-192645-2	250701011-02	Solid	07/01/25 06:57	07/02/25 15:00

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Method	Method Description	Protocol	Laboratory
EPA 8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	EET PIT
8290A	Dioxins and Furans (HRGC/HRMS)	SW846	ELLE
1664B	HEM and SGT-HEM	1664B	ELLE
9071B	HEM and SGT-HEM	SW846	ELLE
EPA 9065	Phenolics, Total Recoverable	SW846	EET PIT
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
3541	Automated Soxhlet Extraction	SW846	EET PIT
9071B	Preparation, HEM and SGT-HEM	SW846	ELLE
D3987-85	ASTM Leaching Procedure	ASTM	ELLE
Distill/Phenol	Distillation, Phenolics	None	EET PIT
HRMS-Soxtherm	Soxtherm Extraction	EPA	ELLE

Protocol References:

1664B = EPA-821-98-002
ASTM = ASTM International
EPA = US Environmental Protection Agency
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Client Sample ID: 250701011-01
Date Collected: 07/01/25 06:57
Date Received: 07/02/25 15:00

Lab Sample ID: 180-192645-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			498992	07/03/25 12:09	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250701011-01
Date Collected: 07/01/25 06:57
Date Received: 07/02/25 15:00

Lab Sample ID: 180-192645-1
Matrix: Solid
Percent Solids: 33.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3541			15.2 g	20.0 mL	498959	07/03/25 05:35	MKK	EET PIT
Total/NA	Analysis	EPA 8082A		1	1 mL	1 mL	499056	07/07/25 11:46	JMO	EET PIT
	Instrument ID: CHGC8									
Total/NA	Prep	HRMS-Soxtherm			10.34 g	20 uL	672715	07/17/25 14:00	QQ7G	ELLE
Total/NA	Analysis	8290A		1	20 uL	20 uL	673615	07/20/25 14:49	TJK2	ELLE
	Instrument ID: DF17280B									
Total/NA	Prep	Distill/Phenol			0.51 g	10.0 mL	499070	07/07/25 07:02	RSK	EET PIT
Total/NA	Analysis	EPA 9065		1			499152	07/08/25 11:38	RSK	EET PIT
	Instrument ID: SHAMU									

Client Sample ID: 250701011-02
Date Collected: 07/01/25 06:57
Date Received: 07/02/25 15:00

Lab Sample ID: 180-192645-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
ASTM Leach	Leach	D3987-85			100.07 g	2000 mL	668164	07/08/25 14:03	UNWS	ELLE
ASTM Leach	Analysis	1664B		1	570 mL	1000 mL	671377	07/15/25 09:43	UYB0	ELLE
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540G		1			498992	07/03/25 12:09	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250701011-02
Date Collected: 07/01/25 06:57
Date Received: 07/02/25 15:00

Lab Sample ID: 180-192645-2
Matrix: Solid
Percent Solids: 32.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9071B			20.49 g	20 g	667754	07/07/25 14:47	UYB0	ELLE
Total/NA	Analysis	9071B		1			668449	07/08/25 18:02	QT6L	ELLE
	Instrument ID: NOEQUIP									

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Analyst References:

Lab: EET PIT
- Batch Type: Prep
  - MKK = Mary Kenny
  - RSK = Robert Kurtz
- Batch Type: Analysis
  - ELS = Edwin Shireman
  - JMO = John Oravec
  - RSK = Robert Kurtz

Lab: ELLE
- Batch Type: Leach
  - UNWS = Nicholas Shroyer
- Batch Type: Prep
  - QQ7G = Kerrie Freeburn
  - UYB0 = Yolunder Bunch
- Batch Type: Analysis
  - QT6L = Tesfaye Dabsu
  - TJK2 = Brandon Jensen
  - UYB0 = Yolunder Bunch

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Client Sample ID: 250701011-01
Date Collected: 07/01/25 06:57
Date Received: 07/02/25 15:00

Lab Sample ID: 180-192645-1
Matrix: Solid
Percent Solids: 33.1

Method: SW846 EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg	☼	07/03/25 05:35	07/07/25 11:46	1
PCB-1221	ND		50		ug/Kg	☼	07/03/25 05:35	07/07/25 11:46	1
PCB-1232	ND		50		ug/Kg	☼	07/03/25 05:35	07/07/25 11:46	1
PCB-1242	ND		50		ug/Kg	☼	07/03/25 05:35	07/07/25 11:46	1
PCB-1248	ND		50		ug/Kg	☼	07/03/25 05:35	07/07/25 11:46	1
PCB-1254	**320**		50		ug/Kg	☼	07/03/25 05:35	07/07/25 11:46	1
PCB-1260	ND		50		ug/Kg	☼	07/03/25 05:35	07/07/25 11:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*75*		*17 - 144*	*07/03/25 05:35*	*07/07/25 11:46*	*1*
Tetrachloro-m-xylene (Surr)	*68*		*17 - 144*	*07/03/25 05:35*	*07/07/25 11:46*	*1*
DCB Decachlorobiphenyl (Surr)	*74*		*26 - 142*	*07/03/25 05:35*	*07/07/25 11:46*	*1*
DCB Decachlorobiphenyl (Surr)	*76*		*26 - 142*	*07/03/25 05:35*	*07/07/25 11:46*	*1*

Method: SW846 8290A - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		2.9		pg/g	☼	07/17/25 14:00	07/20/25 14:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*63*		*40 - 135*	*07/17/25 14:00*	*07/20/26 14:49*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable (SW846 EPA 9065)	**0.80**		0.59		mg/Kg	☼	07/07/25 07:02	07/08/25 11:38	1
Total Solids (SM 2540G)	**33**		0.50		%			07/03/25 12:09	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Client Sample ID: 250701011-02
Date Collected: 07/01/25 06:57
Date Received: 07/02/25 15:00

Lab Sample ID: 180-192645-2
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	32		0.50		%			07/03/25 12:09	1

General Chemistry - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (1664B)	ND		8.8		mg/L			07/15/25 09:43	1

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Client Sample ID: 250701011-02
Date Collected: 07/01/25 06:57
Date Received: 07/02/25 15:00

Lab Sample ID: 180-192645-2
Matrix: Solid
Percent Solids: 32.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease) (SW846 9071B	12000		1800		mg/Kg	☼	07/07/25 14:47	07/08/25 18:02	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Method: EPA 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 180-498959/1-A
Matrix: Solid
Analysis Batch: 499056

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498959

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		17		ug/Kg		07/03/25 05:35	07/07/25 09:58	1
PCB-1221	ND		17		ug/Kg		07/03/25 05:35	07/07/25 09:58	1
PCB-1232	ND		17		ug/Kg		07/03/25 05:35	07/07/25 09:58	1
PCB-1242	ND		17		ug/Kg		07/03/25 05:35	07/07/25 09:58	1
PCB-1248	ND		17		ug/Kg		07/03/25 05:35	07/07/25 09:58	1
PCB-1254	ND		17		ug/Kg		07/03/25 05:35	07/07/25 09:58	1
PCB-1280	ND		17		ug/Kg		07/03/25 05:35	07/07/25 09:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene (Surr)	*107*		*17 - 144*	*07/03/25 05:35*	*07/07/25 09:58*	*1*
Tetrachloro-m-xylene (Surr)	*105*		*17 - 144*	*07/03/25 05:35*	*07/07/25 09:58*	*1*
DCB Decachlorobiphenyl (Surr)	*100*		*26 - 142*	*07/03/25 05:35*	*07/07/25 09:58*	*1*
DCB Decachlorobiphenyl (Surr)	*96*		*26 - 142*	*07/03/25 05:35*	*07/07/25 09:58*	*1*

Lab Sample ID: LCS 180-498959/4-A
Matrix: Solid
Analysis Batch: 499056

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 498959

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016	1330	1080		ug/Kg		81	53 - 115
PCB-1260	1330	1020		ug/Kg		77	45 - 108

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*94*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*92*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*94*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*95*		*26 - 142*

Lab Sample ID: LCSD 180-498959/5-A
Matrix: Solid
Analysis Batch: 499056

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 498959

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016	1330	1110		ug/Kg		83	53 - 115	3	25
PCB-1260	1330	1010		ug/Kg		76	45 - 108	1	23

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene (Surr)	*92*		*17 - 144*
Tetrachloro-m-xylene (Surr)	*90*		*17 - 144*
DCB Decachlorobiphenyl (Surr)	*92*		*26 - 142*
DCB Decachlorobiphenyl (Surr)	*87*		*26 - 142*

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Method: 8290A - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 410-672715/1-A
Matrix: Solid
Analysis Batch: 673611

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		1.0		pg/g		07/17/25 14:00	07/20/25 02:27	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*72*		*40 - 135*	*07/17/25 14:00*	*07/20/25 02:27*	*1*

Lab Sample ID: LCS 410-672715/2-A
Matrix: Solid
Analysis Batch: 673611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,3,7,8-TCDD	20.0	23.0		pg/g		115	66 - 120

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*86*		*40 - 135*

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 410-671377/1
Matrix: Solid
Analysis Batch: 671377

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L			07/15/25 09:43	1

Lab Sample ID: LCS 410-671377/2
Matrix: Solid
Analysis Batch: 671377

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	40.0	31.3		mg/L		78	78 - 114

Lab Sample ID: LCSD 410-671377/3
Matrix: Solid
Analysis Batch: 671377

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	35.6		mg/L		89	78 - 114	13	13

Lab Sample ID: LB 410-668164/1-A
Matrix: Solid
Analysis Batch: 671377

Client Sample ID: Method Blank
Prep Type: ASTM Leach

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.3		mg/L			07/15/25 09:43	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Method: 9071B - HEM and SGT-HEM

Lab Sample ID: MB 410-667754/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 668449 — **Prep Batch: 667754**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		600		mg/Kg		07/07/25 14:47	07/08/25 18:02	1

Lab Sample ID: LCS 410-667754/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 668449 — **Prep Batch: 667754**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	4970	5050		mg/Kg		102	89 - 113

Lab Sample ID: 410-229477-A-1-F MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 668449 — **Prep Batch: 667754**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
HEM (Oil & Grease)	ND	FL	17300	18700		mg/Kg	☼	100	89 - 113

Lab Sample ID: 410-229477-A-1-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 668449 — **Prep Batch: 667754**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
HEM (Oil & Grease)	ND	FL	17000	15600	FL	mg/Kg	☼	83	89 - 113	18	26

Lab Sample ID: 410-229477-A-1-E DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 668449 — **Prep Batch: 667754**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
HEM (Oil & Grease)	ND	FL	2240		mg/Kg	☼	NC	20

Method: EPA 9065 - Phenolics, Total Recoverable

Lab Sample ID: MB 180-499070/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499152 — **Prep Batch: 499070**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.20		mg/Kg		07/07/25 07:02	07/08/25 11:36	1

Lab Sample ID: LCS 180-499070/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499152 — **Prep Batch: 499070**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	4.00	3.78		mg/Kg		94	90 - 110

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

Method: EPA 9065 - Phenolics, Total Recoverable (Continued)

Lab Sample ID: 180-192645-1 MS — **Client Sample ID: 250701011-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499152 — **Prep Batch: 499070**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.80		11.6	11.3		mg/Kg	☼	90	90 - 110

Lab Sample ID: 180-192645-1 MSD — **Client Sample ID: 250701011-01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 499152 — **Prep Batch: 499070**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenolics, Total Recoverable	0.80		11.4	11.3		mg/Kg	☼	92	90 - 110	0	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-192649-D-2 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 498992

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	82		81.9		%		0.5	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

GC Semi VOA

Prep Batch: 498959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-1	250701011-01	Total/NA	Solid	3541	
MB 180-498959/1-A	Method Blank	Total/NA	Solid	3541	
LCS 180-498959/4-A	Lab Control Sample	Total/NA	Solid	3541	
LCSD 180-498959/5-A	Lab Control Sample Dup	Total/NA	Solid	3541	

Analysis Batch: 499056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-1	250701011-01	Total/NA	Solid	EPA 8082A	498959
MB 180-498959/1-A	Method Blank	Total/NA	Solid	EPA 8082A	498959
LCS 180-498959/4-A	Lab Control Sample	Total/NA	Solid	EPA 8082A	498959
LCSD 180-498959/5-A	Lab Control Sample Dup	Total/NA	Solid	EPA 8082A	498959

Specialty Organics

Prep Batch: 672715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-1	250701011-01	Total/NA	Solid	HRMS-Soxtherm	
MB 410-672715/1-A	Method Blank	Total/NA	Solid	HRMS-Soxtherm	
LCS 410-672715/2-A	Lab Control Sample	Total/NA	Solid	HRMS-Soxtherm	

Analysis Batch: 673611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-672715/1-A	Method Blank	Total/NA	Solid	8290A	672715
LCS 410-672715/2-A	Lab Control Sample	Total/NA	Solid	8290A	672715

Analysis Batch: 673615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-1	250701011-01	Total/NA	Solid	8290A	672715

General Chemistry

Analysis Batch: 498992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-1	250701011-01	Total/NA	Solid	SM 2540G	
180-192645-2	250701011-02	Total/NA	Solid	SM 2540G	
180-192649-D-2 DU	Duplicate	Total/NA	Solid	SM 2540G	

Prep Batch: 499070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-1	250701011-01	Total/NA	Solid	Distill/Phenol	
MB 180-499070/1-A	Method Blank	Total/NA	Solid	Distill/Phenol	
LCS 180-499070/2-A	Lab Control Sample	Total/NA	Solid	Distill/Phenol	
180-192645-1 MS	250701011-01	Total/NA	Solid	Distill/Phenol	
180-192645-1 MSD	250701011-01	Total/NA	Solid	Distill/Phenol	

Analysis Batch: 499152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-1	250701011-01	Total/NA	Solid	EPA 9065	499070
MB 180-499070/1-A	Method Blank	Total/NA	Solid	EPA 9065	499070
LCS 180-499070/2-A	Lab Control Sample	Total/NA	Solid	EPA 9065	499070
180-192645-1 MS	250701011-01	Total/NA	Solid	EPA 9065	499070
180-192645-1 MSD	250701011-01	Total/NA	Solid	EPA 9065	499070

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-192645-1
SDG: 250701011

General Chemistry

Prep Batch: 667754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-2	250701011-02	Total/NA	Solid	9071B	
MB 410-667754/1-A	Method Blank	Total/NA	Solid	9071B	
LCS 410-667754/2-A	Lab Control Sample	Total/NA	Solid	9071B	
410-229477-A-1-F MS	Matrix Spike	Total/NA	Solid	9071B	
410-229477-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	9071B	
410-229477-A-1-E DU	Duplicate	Total/NA	Solid	9071B	

Leach Batch: 668164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-2	250701011-02	ASTM Leach	Solid	D3987-85	
LB 410-668164/1-A	Method Blank	ASTM Leach	Solid	D3987-85	

Analysis Batch: 668449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-2	250701011-02	Total/NA	Solid	9071B	667754
MB 410-667754/1-A	Method Blank	Total/NA	Solid	9071B	667754
LCS 410-667754/2-A	Lab Control Sample	Total/NA	Solid	9071B	667754
410-229477-A-1-F MS	Matrix Spike	Total/NA	Solid	9071B	667754
410-229477-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	9071B	667754
410-229477-A-1-E DU	Duplicate	Total/NA	Solid	9071B	667754

Analysis Batch: 671377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-192645-2	250701011-02	ASTM Leach	Solid	1664B	668164
LB 410-668164/1-A	Method Blank	ASTM Leach	Solid	1664B	668164
MB 410-671377/1	Method Blank	Total/NA	Solid	1664B	
LCS 410-671377/2	Lab Control Sample	Total/NA	Solid	1664B	
LCSD 410-671377/3	Lab Control Sample Dup	Total/NA	Solid	1664B	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250701011**

Additional Information : Quarterly Unlimed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: See attached Parameter List	HEM, ASTM HEM, % total solids	VOA EPA 8260D *	Total Solids		
250701011-01	7/1/25	0657	S	N	G	Always maintain sample/extract at	1					
250701011-02	7/1/25	0657	S	N	G	25°C when reading any pH result.		1				
250701011-03	7/1/25	0657	S	N*	G	Solids must be analyzed by 2540G.			6	1		
						All methods must be accredited by						
						PADEP or NELAC.						
						Email a copy of LIMS login with signed						
						COC as soon as possible after receipt.						
						Report Level II data package.						
						Document ASTM Extraction date/time						
						And out of hold extraction on report.						

180-192645 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ALCOSAN	7-2-25	0930	[signature]	EUROFINS	7-2-25	9:30
[signature]	EPITINE	7-2-25	1500	[signature]	EPITINE	7/2/25	1500

COC Analyst Cooler Review: Initials: [signature] Date: 7-2-25

Supervisor Review: Initials: [signature] Date: 7/25

Contract Lab GRAB portion of Quarterly Analysis when shared with ALCOSAN Lab

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, GRIT, SCUM & LIMED SLUDGE- QUARTERLY			
Check reporting limit requirements.	Quarterly	AMBER GRAB (1 Amber quart) PCBs * 2 3 7 8-TCDD* Phenolics Solids Total SM2540G)* HEM GRAB (1 clear pint) O I & Grease * Solids Total (SM2540G)* ASTM Oil & Grea e * VOA GRAB (1 vial + 1 jar for TS) 8260 Volat le Organics * Solids Tcta (SM2540G)* Analyses done on a separate grab sample for each matrix.	Laboratory

Red indicates analyses performed by a contract laboratory

SEND 1 CLEAR PINT GRAB FOR HEM, 1 AMBER QUART GRAB FOR EACH LOCATION, AND 1 VOA VIAL GRAB WITH 1 JAR FOR TS)

Alcosan #20 -0.8

J10 2.4 / 1.6

180-192645 Waybill

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shali	Carrier Tracking No(s): N/A	COC No: 180-541546.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shali.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-192645-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 7/16/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Unlimed Sludge	Project #: 18007110			Other: N/A
Site: N/A	SSOW#: N/A			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Oil, Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8290A/HRMS_Sordfm_P2,3,7,8-TCDD	9071B/9071B_P_Sox(MOD) HEM (Oil and Grease) mg/Kg dw	1664B_NP/ASTM_LEACH_NPHEM Only	8260D/8036FP_CalcAlcohol Volatile List	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
250701011-01 (180-192645-1)	7/1/25	06:57 Eastern	G	Solid			X				1	
250701011-02 (180-192645-2)	7/1/25	06:57 Eastern	G	Solid				X	X		1	
250701011-03 (180-192645-3)	7/1/25	06:57 Eastern	G	Solid						X	8	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification
Unconfirmed

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 7-3-25 1400	Company: EHL	Received by:	Date/Time: 7-3-25 14:50	Company: ELLE
Relinquished by:	Date/Time: 7-3-25 19:15	Company: ELLE	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time: 7/3/25 1910	Company: ELLET

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0-5.7 2.8-5.x

Ver: 10/10/2024

7/25/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192645-1
SDG Number: 250701011

Login Number: 192645
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-192645-1
SDG Number: 250701011

Login Number: 192645
List Number: 2
Creator: Cyms, Carolyn M

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/03/25 07:51 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepencies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250722015 **Sample Date:** 7/21/2025

Sample ID Number: 250722015-01 **Sample Type:** GRAB

Customer Sample Number: VOA GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments
Daily 1								
Percent Total Solids	Contract Lab	EurofinsPittsburgh	7/23/2025	35	%	0.50		
Volatile Organics								
Volatile Organics	Contract Lab	EurofinsLancaster	8/4/2025	See attached report	ug/Kg Dry			A 2nd sample run was conducted outside of hold time and can be referenced in the attached report. Samples in the 2nd run were prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.

Printed Date
Friday, August 15, 2025

3300 Preble Avenue
Pittsburgh, PA 15233-1092
ph: 412.766.4810 fx: 412.732.8023
PADEP Lab # 02-00589

Environmental Compliance Laboratory Report

Quarterly Unlimed Sludge

Lab ID Number: 250722015 **Sample Date:** 7/21/2025

Sample ID Number: 250722015-01 **Sample Type:** GRAB

Customer Sample Number: VOA GRAB

Parameter	Method Number	Analyst	Analysis Date	Result	Units	RL	Qualifier	Comments

Data Qualifier **Data Qualifier Description**

Comments:

QUARTERLY GRAB. RESAMPLE VOA & TS GRABS

Contract Lab	Contract Lab Certification Number
EurofinsPittsburgh	PADEP 02-00416
EurofinsLancaster	NELAP PA 36-00037

Released by: Larissa Houck

8-15-25

Date

Printed Date
Friday, August 15, 2025

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Larissa Hoover
Allegheny County Sanitary Authority
Purchasing Dept
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233-1092

Generated 8/5/2025 5:03:43 PM

JOB DESCRIPTION

Quarterly Unlimed Sludge
250722015

JOB NUMBER

180-193450-1

Eurofins Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh PA 15238

See page two for job notes and contact information.

my EOL

Eurofins Pittsburgh

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Pittsburgh Project Manager.

Authorization

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8/5/2025 5:03:43 PM

Authorized for release by
Shall Brown, Project Manager II
Shall.Brown@et.eurofinsus.com
(615)301-5031

Table of Contents

Cover Page 1
Table of Contents 3
Case Narrative 4
Definitions/Glossary 5
Certification Summary 6
Sample Summary 7
Method Summary 8
Lab Chronicle 9
Client Sample Results 10
QC Sample Results 13
QC Association Summary 21
Chain of Custody 22
Receipt Checklists 24

Job Narrative
180-193450-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 7/22/2025 1:30 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Method 8260D: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: 250722015-01 (180-193450-1). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 410-680064 recovered above the upper control limit for Methyl Ethyl Ketone, Bromoform, Bromomethane, Chloroethane, Dibromochloromethane and Vinyl acetate. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. 250722015-01 (180-193450-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Definitions/Glossary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^c	CCV Recovery is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicatee a Dilution, Re-analysis, Re-extraction, or additional initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Laboratory: Eurofins Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	02-00416	04-30-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-26

Sample Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-193450-1	250722015-01	Solid	07/21/25 06:26	07/22/25 13:30

Method Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET PIT
5035	Closed System Purge and Trap	SW846	ELLE

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Client Sample ID: 250722015-01 — **Lab Sample ID: 180-193450-1**
Date Collected: 07/21/25 06:26 — **Matrix: Solid**
Date Received: 07/22/25 13:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540G		1			500100	07/23/25 11:51	ELS	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: 250722015-01 — **Lab Sample ID: 180-193450-1**
Date Collected: 07/21/25 06:26 — **Matrix: Solid**
Date Received: 07/22/25 13:30 — **Percent Solids: 34.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.08 g	5 mL	679338	08/01/25 08:14	PV7W	ELLE
Total/NA	Analysis	6260D		500	5 mL	5 mL	680064	06/04/25 18:43	Y6ZN	ELLE
	Instrument ID: 7566									
Total/NA	Prep	5035	RA		5.08 g	5 mL	679338	08/01/25 08:14	PV7W	ELLE
Total/NA	Analysis	6260D	RA	500	5 mL	5 mL	680690	06/05/25 13:09	S8BP	ELLE
	Instrument ID: 7566									

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: EET PIT
- Batch Type: Analysis
  - ELS = Edwin Shireman

Lab: ELLE
- Batch Type: Prep
  - PV7W = Trinity Breneman
- Batch Type: Analysis
  - S8BP = Kirsten Loeb
  - Y6ZN = Marissa Drexinger

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Client Sample ID: 250722015-01
Date Collected: 07/21/25 06:26
Date Received: 07/22/25 13:30

Lab Sample ID: 180-193450-1
Matrix: Solid
Percent Solids: 34.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
1,1,2,2-Tetrachloroethane	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
1,1,2-Trichloroethane	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
1,1-Dichloroethane	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
1,1-Dichloroethene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
1,2-Dichlorobenzene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
1,2-Dichloroethene	ND		12000		ug/Kg	☼	08/01/26 08:14	08/04/25 18:43	500
1,2-Dichloropropane	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
1,3-Dichlorobenzene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
1,4-Dichlorobenzene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Methyl Ethyl Ketone	**24000**	**^c**	24000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
2-Chloroethyl vinyl ether	ND		24000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
2-Hexanone	ND		24000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
methyl isobutyl ketone	ND		24000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Acetone	**92000**		47000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Benzene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Bromodichloromethane	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Bromoform	ND	^c	24000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Bromomethane	ND	^c *+	12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Carbon disulfide	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Carbon tetrachloride	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Chlorobenzene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Chloroethane	ND	^c *+	12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Chloroform	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Chloromethane	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
cis-1,3-Dichloropropene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Dibromochloromethene	ND	^c	12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Ethylbenzene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
m-Xylene & p-Xylene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Methylene Chloride	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
o-Xylene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Styrene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Tetrachloroethene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Toluene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
trans-1,2-Dichloroethene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
trans-1,3-Dichloropropene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Trichloroethene	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Trichlorofluoromethane	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Vinyl acetate	ND	^c *+	24000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Vinyl chloride	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500
Xylenes, Total	ND		12000		ug/Kg	☼	08/01/25 08:14	08/04/25 18:43	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*30*	*S1-*	*54 - 135*	*08/01/25 08:14*	*08/04/25 18:43*	*500*
4-Bromofluorobenzene (Surr)	*46*	*S1-*	*50 - 131*	*08/01/25 08:14*	*08/04/25 18:43*	*500*
Dibromofluoromethane (Surr)	*53*		*50 - 141*	*08/01/25 08:14*	*08/04/25 18:43*	*500*
Toluene-d8 (Surr)	*45*	*S1-*	*52 - 141*	*08/01/25 08:14*	*08/04/25 18:43*	*500*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Client Sample ID: 250722015-01
Date Collected: 07/21/25 06:26
Date Received: 07/22/25 13:30

Lab Sample ID: 180-193450-1
Matrix: Solid
Percent Solids: 34.7

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,1,2,2-Tetrachloroethane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,1,2-Trichloroethane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,1-Dichloroethane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,1-Dichloroethene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,2-Dichlorobenzene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,2-Dichloroethane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,2-Dichloropropane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,3-Dichlorobenzene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
1,4-Dichlorobenzene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Methyl Ethyl Ketone	**27000**	**H**	24000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
2-Chloroethyl vinyl ether	ND	H	24000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
2-Hexanone	ND	H	24000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
methyl isobutyl ketone	ND	H	24000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Acetone	**97000**	**H ^c**	47000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Benzene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Bromodichloromethane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Bromoform	ND	H	24000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Bromomethane	ND	H *+ ^c	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Carbon disulfide	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Carbon tetrachloride	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Chlorobenzene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Chloroethane	ND	H *+ ^c	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Chloroform	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Chloromethane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
cis-1,3-Dichloropropene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Dibromochloromethane	ND	H ^c	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Ethylbenzene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
m-Xylene & p-Xylene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Methylene Chloride	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
o-Xylene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Styrene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Tetrachloroethene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Toluene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
trans-1,2-Dichloroethene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
trans-1,3-Dichloropropene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Trichloroethene	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Trichlorofluoromethane	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Vinyl acetate	ND	H ^c *+	24000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Vinyl chloride	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500
Xylenes, Total	ND	H	12000		ug/Kg	☼	08/01/25 08:14	08/05/25 13:09	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*48*	*S1-*	*54 - 135*	*08/01/25 08:14*	*08/05/25 13:09*	*500*
4-Bromofluorobenzene (Surr)	*47*	*S1-*	*50 - 131*	*08/01/25 08:14*	*08/05/25 13:09*	*500*
Dibromofluoromethane (Surr)	*50*		*50 - 141*	*08/01/25 08:14*	*08/05/25 13:09*	*500*
Toluene-d8 (Surr)	*46*	*S1-*	*52 - 141*	*08/01/25 08:14*	*08/05/25 13:09*	*500*

Client Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Client Sample ID: 250722015-01
Date Collected: 07/21/25 06:26
Date Received: 07/22/25 13:30

Lab Sample ID: 180-193450-1
Matrix: Solid
Percent Solids: 34.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	35		0.50		%			07/23/25 11:51	1

QC Sample Results

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-680064/13
Matrix: Solid
Analysis Batch: 680084

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250		ug/Kg			08/04/25 12:26	50
1,1,2,2-Tetrachloroethane	ND		250		ug/Kg			08/04/25 12:26	50
1,1,2-Trichloroethane	ND		250		ug/Kg			08/04/25 12:26	50
1,1-Dichloroethane	ND		250		ug/Kg			08/04/25 12:26	50
1,1-Dichloroethene	ND		250		ug/Kg			08/04/25 12:26	50
1,2-Dichlorobenzene	ND		250		ug/Kg			08/04/25 12:26	50
1,2-Dichloroethane	ND		250		ug/Kg			08/04/25 12:26	50
1,2-Dichloropropane	ND		250		ug/Kg			08/04/25 12:26	50
1,3-Dichlorobenzene	ND		250		ug/Kg			08/04/25 12:26	50
1,4-Dichlorobenzene	ND		250		ug/Kg			08/04/25 12:26	50
Methyl Ethyl Ketone	ND		500		ug/Kg			08/04/25 12:26	50
2-Chloroethyl vinyl ether	ND		500		ug/Kg			08/04/25 12:26	50
2-Hexanone	ND		500		ug/Kg			08/04/25 12:26	50
methyl isobutyl ketone	ND		500		ug/Kg			08/04/25 12:26	50
Acetone	ND		1000		ug/Kg			08/04/25 12:26	50
Benzene	ND		250		ug/Kg			08/04/25 12:26	50
Bromodichloromethane	ND		250		ug/Kg			08/04/25 12:26	50
Bromoform	ND		500		ug/Kg			08/04/25 12:26	50
Bromomethane	ND		250		ug/Kg			08/04/25 12:26	50
Carbon disulfide	ND		250		ug/Kg			08/04/25 12:26	50
Carbon tetrachloride	ND		250		ug/Kg			08/04/25 12:26	50
Chlorobenzene	ND		250		ug/Kg			08/04/25 12:26	50
Chloroethane	ND		250		ug/Kg			08/04/25 12:26	50
Chloroform	ND		250		ug/Kg			08/04/25 12:26	50
Chloromethane	ND		250		ug/Kg			08/04/25 12:26	50
cis-1,3-Dichloropropene	ND		250		ug/Kg			08/04/25 12:26	50
Dibromochloromethane	ND		250		ug/Kg			08/04/25 12:26	50
Ethylbenzene	ND		250		ug/Kg			08/04/25 12:26	50
m-Xylene & p-Xylene	ND		250		ug/Kg			08/04/25 12:26	50
Methylene Chloride	ND		250		ug/Kg			08/04/25 12:26	50
o-Xylene	ND		250		ug/Kg			08/04/25 12:26	50
Styrene	ND		250		ug/Kg			08/04/25 12:26	50
Tetrachloroethene	ND		250		ug/Kg			08/04/25 12:26	50
Toluene	ND		250		ug/Kg			08/04/25 12:26	50
trans-1,2-Dichloroethene	ND		250		ug/Kg			08/04/25 12:26	50
trans-1,3-Dichloropropene	ND		250		ug/Kg			08/04/25 12:26	50
Trichloroethene	ND		250		ug/Kg			08/04/25 12:26	50
Trichlorofluoromethane	ND		250		ug/Kg			08/04/25 12:26	50
Vinyl acetate	ND		500		ug/Kg			08/04/25 12:26	50
Vinyl chloride	ND		250		ug/Kg			08/04/25 12:26	50
Xylenes, Total	ND		250		ug/Kg			08/04/25 12:26	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*54 - 135*		*08/04/25 12:26*	*50*
4-Bromofluorobenzene (Surr)	*90*		*50 - 131*		*08/04/25 12:26*	*50*
Dibromofluoromethane (Surr)	*97*		*50 - 141*		*08/04/25 12:26*	*50*
Toluene-d8 (Surr)	*93*		*52 - 141*		*08/04/26 12:26*	*50*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-680064/8
Matrix: Solid
Analysis Batch: 680064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1000	1050		ug/Kg		105	69 - 123
1,1,2,2-Tetrachloroethane	1000	988		ug/Kg		99	69 - 125
1,1,2-Trichloroethane	1000	1010		ug/Kg		101	76 - 120
1,1-Dichloroethane	1000	1030		ug/Kg		103	68 - 120
1,1-Dichloroethene	1000	1150		ug/Kg		115	73 - 129
1,2-Dichlorobenzene	1000	907		ug/Kg		91	74 - 120
1,2-Dichloroethene	1000	1000		ug/Kg		100	72 - 124
1,2-Dichloropropane	1000	988		ug/Kg		99	70 - 124
1,3-Dichlorobenzene	1000	921		ug/Kg		92	75 - 120
1,4-Dichlorobenzene	1000	924		ug/Kg		92	76 - 122
Methyl Ethyl Ketone	12500	13000		ug/Kg		104	48 - 142
2-Chloroethyl vinyl ether	1000	973		ug/Kg		97	68 - 120
2-Hexanone	12500	11800		ug/Kg		95	54 - 140
methyl isobutyl ketone	12500	11800		ug/Kg		94	67 - 138
Acetone	12500	11300		ug/Kg		90	28 - 169
Benzene	1000	1020		ug/Kg		102	80 - 120
Bromodichloromethane	1000	1060		ug/Kg		106	70 - 120
Bromoform	1000	1010		ug/Kg		101	66 - 127
Bromomethane	1000	1680	*+	ug/Kg		168	60 - 120
Carbon disulfide	1000	966		ug/Kg		99	64 - 133
Carbon tetrachloride	1000	1080		ug/Kg		108	64 - 120
Chlorobenzene	1000	1010		ug/Kg		101	74 - 120
Chloroethane	1000	1560	*+	ug/Kg		156	55 - 127
Chloroform	1000	1040		ug/Kg		104	73 - 120
Chloromethane	1000	935		ug/Kg		94	43 - 120
cis-1,3-Dichloropropene	1000	999		ug/Kg		100	66 - 120
Dibromochloromethene	1000	1090		ug/Kg		109	69 - 125
Ethylbenzene	1000	973		ug/Kg		97	72 - 116
m-Xylene & p-Xylene	2000	2000		ug/Kg		100	80 - 120
Methylene Chloride	1000	1070		ug/Kg		107	76 - 122
o-Xylene	1000	979		ug/Kg		98	75 - 120
Styrene	1000	982		ug/Kg		98	76 - 120
Tetrachloroethene	1000	1080		ug/Kg		108	73 - 120
Toluene	1000	1010		ug/Kg		101	71 - 120
trans-1,2-Dichloroethene	1000	1090		ug/Kg		109	71 - 126
trans-1,3-Dichloropropene	1000	992		ug/Kg		99	68 - 122
Trichloroethene	1000	995		ug/Kg		99	72 - 120
Trichlorofluoromethane	1000	971		ug/Kg		97	49 - 120
Vinyl chloride	1000	979		ug/Kg		98	52 - 120
Xylenes, Total	3000	2980		ug/Kg		99	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*54 - 135*
4-Bromofluorobenzene (Surr)	*94*		*50 - 131*
Dibromofluoromethane (Surr)	*102*		*50 - 141*
Toluene-d8 (Surr)	*96*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-680064/8
Matrix: Solid
Analysis Batch: 680064

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	5000	7310	*+	ug/Kg		146	68 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		64 - 135
4-Bromofluorobenzene (Surr)	91		50 - 131
Dibromofluoromethane (Surr)	99		50 - 141
Toluene-d8 (Surr)	95		52 - 141

Lab Sample ID: LCSD 410-680064/7
Matrix: Solid
Analysis Batch: 660064

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	1050		ug/Kg		105	69 - 123	0	30
1,1,2,2-Tetrachloroethane	1000	943		ug/Kg		94	69 - 125	5	30
1,1,2-Trichloroethane	1000	1000		ug/Kg		100	76 - 120	0	30
1,1-Dichloroethane	1000	1040		ug/Kg		104	68 - 120	1	30
1,1-Dichloroethene	1000	1160		ug/Kg		116	73 - 129	0	30
1,2-Dichlorobenzene	1000	885		ug/Kg		88	74 - 120	2	30
1,2-Dichloroethane	1000	988		ug/Kg		99	72 - 124	2	30
1,2-Dichloropropane	1000	991		ug/Kg		99	70 - 124	0	30
1,3-Dichlorobenzene	1000	900		ug/Kg		90	75 - 120	2	30
1,4-Dichlorobenzene	1000	904		ug/Kg		90	76 - 122	2	30
Methyl Ethyl Ketone	12500	13200		ug/Kg		106	46 - 142	1	30
2-Chloroethyl vinyl ether	1000	999		ug/Kg		100	68 - 120	3	30
2-Hexanone	12500	11900		ug/Kg		95	54 - 140	0	30
methyl isobutyl ketone	12500	11700		ug/Kg		94	67 - 138	1	30
Acetone	12500	11900		ug/Kg		96	28 - 169	6	30
Benzene	1000	1020		ug/Kg		102	80 - 120	0	30
Bromodichloromethane	1000	1080		ug/Kg		108	70 - 120	1	30
Bromoform	1000	1040		ug/Kg		104	66 - 127	2	30
Bromomethane	1000	1660	*+	ug/Kg		166	60 - 120	1	30
Carbon disulfide	1000	995		ug/Kg		100	64 - 133	1	30
Carbon tetrachloride	1000	1080		ug/Kg		108	64 - 120	0	30
Chlorobenzene	1000	1000		ug/Kg		100	74 - 120	1	30
Chloroethene	1000	1550	*+	ug/Kg		155	55 - 127	1	30
Chloroform	1000	1030		ug/Kg		103	73 - 120	1	30
Chloromethane	1000	941		ug/Kg		94	43 - 120	1	30
cis-1,3-Dichloropropene	1000	996		ug/Kg		100	66 - 120	0	30
Dibromochloromethane	1000	1110		ug/Kg		111	69 - 125	1	30
Ethylbenzene	1000	965		ug/Kg		97	72 - 118	1	30
m-Xylene & p-Xylene	2000	1970		ug/Kg		99	80 - 120	1	30
Methylene Chloride	1000	1060		ug/Kg		106	76 - 122	1	30
o-Xylene	1000	985		ug/Kg		98	75 - 120	1	30
Styrene	1000	976		ug/Kg		98	76 - 120	0	30
Tetrachloroethene	1000	1060		ug/Kg		106	73 - 120	2	30
Toluene	1000	1000		ug/Kg		100	71 - 120	0	30
trans-1,2-Dichloroethene	1000	1070		ug/Kg		107	71 - 126	2	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-680064/7
Matrix: Solid
Analysis Batch: 680064

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	1000	996		ug/Kg		100	68 - 122	0	30
Trichloroethene	1000	983		ug/Kg		98	72 - 120	1	30
Trichlorofluoromethane	1000	968		ug/Kg		97	49 - 120	0	30
Vinyl chloride	1000	973		ug/Kg		97	52 - 120	1	30
Xylenes, Total	3000	2960		ug/Kg		99	75 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*54 - 135*
4-Bromofluorobenzene (Surr)	*93*		*50 - 131*
Dibromofluoromethane (Surr)	*102*		*50 - 141*
Toluene-d8 (Surr)	*96*		*52 - 141*

Lab Sample ID: LCSD 410-680064/9
Matrix: Solid
Analysis Batch: 680064

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	5000	7030	*+	ug/Kg		141	68 - 128	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*54 - 135*
4-Bromofluorobenzene (Surr)	*90*		*50 - 131*
Dibromofluoromethane (Surr)	*97*		*50 - 141*
Toluene-d8 (Surr)	*94*		*52 - 141*

Lab Sample ID: MB 410-680690/10
Matrix: Solid
Analysis Batch: 680690

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		250		ug/Kg			08/05/25 12:07	50
1,1,2,2-Tetrachloroethane	ND		250		ug/Kg			08/05/25 12:07	50
1,1,2-Trichloroethane	ND		250		ug/Kg			08/05/25 12:07	50
1,1-Dichloroethane	ND		250		ug/Kg			08/05/25 12:07	50
1,1-Dichloroethene	ND		250		ug/Kg			08/05/25 12:07	50
1,2-Dichlorobenzene	ND		250		ug/Kg			08/05/25 12:07	50
1,2-Dichloroethane	ND		250		ug/Kg			08/05/25 12:07	50
1,2-Dichloropropane	ND		250		ug/Kg			08/05/25 12:07	50
1,3-Dichlorobenzene	ND		250		ug/Kg			08/05/25 12:07	50
1,4-Dichlorobenzene	ND		250		ug/Kg			08/05/25 12:07	50
Methyl Ethyl Ketone	ND		500		ug/Kg			08/05/25 12:07	50
2-Chloroethyl vinyl ether	ND		500		ug/Kg			08/05/25 12:07	50
2-Hexanone	ND		500		ug/Kg			08/05/25 12:07	50
methyl isobutyl ketone	ND		500		ug/Kg			08/05/25 12:07	50
Acetone	ND		1000		ug/Kg			08/05/25 12:07	50
Benzene	ND		250		ug/Kg			08/05/25 12:07	50
Bromodichloromethane	ND		250		ug/Kg			08/05/25 12:07	50
Bromoform	ND		500		ug/Kg			08/05/25 12:07	50

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-680690/10
Matrix: Solid
Analysis Batch: 680690

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		250		ug/Kg			08/05/25 12:07	50
Carbon disulfide	ND		250		ug/Kg			08/05/25 12:07	50
Carbon tetrachloride	ND		250		ug/Kg			08/05/25 12:07	50
Chlorobenzene	ND		250		ug/Kg			08/05/25 12:07	50
Chloroethane	ND		250		ug/Kg			08/05/25 12:07	50
Chloroform	ND		250		ug/Kg			08/05/25 12:07	50
Chloromethane	ND		250		ug/Kg			08/05/25 12:07	50
cis-1,3-Dichloropropene	ND		250		ug/Kg			08/05/25 12:07	50
Dibromochloromethane	ND		250		ug/Kg			08/05/25 12:07	50
Ethylbenzene	ND		250		ug/Kg			08/05/25 12:07	50
m-Xylene & p-Xylene	ND		250		ug/Kg			08/05/25 12:07	50
Methylene Chloride	ND		250		ug/Kg			08/05/25 12:07	50
o-Xylene	ND		250		ug/Kg			08/05/25 12:07	50
Styrene	ND		250		ug/Kg			08/05/25 12:07	50
Tetrachloroethene	ND		250		ug/Kg			08/05/25 12:07	50
Toluene	ND		250		ug/Kg			08/05/25 12:07	50
trans-1,2-Dichloroethene	ND		250		ug/Kg			08/05/25 12:07	50
trans-1,3-Dichloropropene	ND		250		ug/Kg			08/05/25 12:07	50
Trichloroethene	ND		250		ug/Kg			08/05/25 12:07	50
Trichlorofluoromethane	ND		250		ug/Kg			08/05/25 12:07	50
Vinyl acetate	ND		500		ug/Kg			08/05/25 12:07	50
Vinyl chloride	ND		250		ug/Kg			08/05/25 12:07	50
Xylenes, Total	ND		250		ug/Kg			08/05/25 12:07	50

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*54 - 135*		*08/05/25 12:07*	*50*
4-Bromofluorobenzene (Surr)	*88*		*50 - 131*		*08/05/25 12:07*	*50*
Dibromofluoromethane (Surr)	*96*		*50 - 141*		*08/05/25 12:07*	*50*
Toluene-d8 (Surr)	*92*		*52 - 141*		*08/05/25 12:07*	*50*

Lab Sample ID: LCS 410-680690/5
Matrix: Solid
Analysis Batch: 680690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	1000	1020		ug/Kg		102	69 - 123
1,1,2,2-Tetrachloroethane	1000	937		ug/Kg		94	69 - 125
1,1,2-Trichloroethane	1000	995		ug/Kg		100	76 - 120
1,1-Dichloroethane	1000	1020		ug/Kg		102	68 - 120
1,1-Dichloroethene	1000	1120		ug/Kg		112	73 - 129
1,2-Dichlorobenzene	1000	894		ug/Kg		89	74 - 120
1,2-Dichloroethene	1000	965		ug/Kg		96	72 - 124
1,2-Dichloropropane	1000	970		ug/Kg		97	70 - 124
1,3-Dichlorobenzene	1000	917		ug/Kg		92	75 - 120
1,4-Dichlorobenzene	1000	914		ug/Kg		91	76 - 122
Methyl Ethyl Ketone	12500	14500		ug/Kg		116	48 - 142
2-Chloroethyl vinyl ether	1000	953		ug/Kg		95	68 - 120
2-Hexanone	12500	11400		ug/Kg		91	54 - 140

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-680690/5
Matrix: Solid
Analysis Batch: 680690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
methyl isobutyl ketone	12500	10600		ug/Kg		85	67 - 138
Acetone	12500	12000		ug/Kg		96	28 - 169
Benzene	1000	1010		ug/Kg		101	80 - 120
Bromodichloromethane	1000	1050		ug/Kg		105	70 - 120
Bromoform	1000	1020		ug/Kg		102	66 - 127
Bromomethane	1000	2010	*+	ug/Kg		201	60 - 120
Carbon disulfide	1000	982		ug/Kg		98	64 - 133
Carbon tetrachloride	1000	1050		ug/Kg		105	64 - 120
Chlorobenzene	1000	1010		ug/Kg		101	74 - 120
Chloroethane	1000	2020	*+	ug/Kg		202	55 - 127
Chloroform	1000	1020		ug/Kg		102	73 - 120
Chloromethane	1000	828		ug/Kg		83	43 - 120
cis-1,3-Dichloropropene	1000	967		ug/Kg		97	66 - 120
Dibromochloromethene	1000	1090		ug/Kg		109	69 - 125
Ethylbenzene	1000	978		ug/Kg		98	72 - 118
m-Xylene & p-Xylene	2000	2010		ug/Kg		101	80 - 120
Methylene Chloride	1000	1040		ug/Kg		104	76 - 122
o-Xylene	1000	982		ug/Kg		98	75 - 120
Styrene	1000	979		ug/Kg		98	76 - 120
Tetrachloroethene	1000	1070		ug/Kg		107	73 - 120
Toluene	1000	1020		ug/Kg		102	71 - 120
trans-1,2-Dichloroethene	1000	1070		ug/Kg		107	71 - 126
trans-1,3-Dichloropropene	1000	994		ug/Kg		99	68 - 122
Trichloroethene	1000	977		ug/Kg		98	72 - 120
Trichlorofluoromethane	1000	944		ug/Kg		94	49 - 120
Vinyl chloride	1000	883		ug/Kg		88	52 - 120
Xylenes, Total	3000	2990		ug/Kg		100	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*54 - 135*
4-Bromofluorobenzene (Surr)	*93*		*50 - 131*
Dibromofluoromethane (Surr)	*99*		*50 - 141*
Toluene-d8 (Surr)	*97*		*52 - 141*

Lab Sample ID: LCS 410-680690/7
Matrix: Solid
Analysis Batch: 680690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	5000	6530	*+	ug/Kg		131	68 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*54 - 135*
4-Bromofluorobenzene (Surr)	*89*		*50 - 131*
Dibromofluoromethane (Surr)	*95*		*50 - 141*
Toluene-d8 (Surr)	*94*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-680690/6
Matrix: Solid
Analysis Batch: 680690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1000	1020		ug/Kg		102	69 - 123	0	30
1,1,2,2-Tetrachloroethane	1000	959		ug/Kg		96	69 - 125	2	30
1,1,2-Trichloroethane	1000	997		ug/Kg		100	76 - 120	0	30
1,1-Dichloroethane	1000	1020		ug/Kg		102	68 - 120	0	30
1,1-Dichloroethene	1000	1130		ug/Kg		113	73 - 129	1	30
1,2-Dichlorobenzene	1000	900		ug/Kg		90	74 - 120	1	30
1,2-Dichloroethane	1000	940		ug/Kg		94	72 - 124	3	30
1,2-Dichloropropane	1000	974		ug/Kg		97	70 - 124	0	30
1,3-Dichlorobenzene	1000	919		ug/Kg		92	75 - 120	0	30
1,4-Dichlorobenzene	1000	929		ug/Kg		93	76 - 122	2	30
Methyl Ethyl Ketone	12500	14500		ug/Kg		116	46 - 142	1	30
2-Chloroethyl vinyl ether	1000	961		ug/Kg		96	68 - 120	1	30
2-Hexanone	12500	11400		ug/Kg		91	54 - 140	1	30
methyl isobutyl ketone	12500	10700		ug/Kg		86	67 - 138	1	30
Acetone	12500	11500		ug/Kg		92	26 - 169	4	30
Benzene	1000	1010		ug/Kg		101	60 - 120	0	30
Bromodichloromethane	1000	1060		ug/Kg		106	70 - 120	0	30
Bromoform	1000	1030		ug/Kg		103	66 - 127	2	30
Bromomethane	1000	1920	*+	ug/Kg		192	60 - 120	4	30
Carbon disulfide	1000	972		ug/Kg		97	64 - 133	1	30
Carbon tetrachloride	1000	1060		ug/Kg		106	64 - 120	1	30
Chlorobenzene	1000	1010		ug/Kg		101	74 - 120	0	30
Chloroethane	1000	1950	*+	ug/Kg		195	55 - 127	3	30
Chloroform	1000	1020		ug/Kg		102	73 - 120	0	30
Chloromethane	1000	820		ug/Kg		82	43 - 120	1	30
cis-1,3-Dichloropropene	1000	980		ug/Kg		98	66 - 120	1	30
Dibromochloromethane	1000	1110		ug/Kg		111	69 - 125	2	30
Ethylbenzene	1000	972		ug/Kg		97	72 - 118	1	30
m-Xylene & p-Xylene	2000	1990		ug/Kg		100	80 - 120	1	30
Methylene Chloride	1000	1050		ug/Kg		105	76 - 122	1	30
o-Xylene	1000	986		ug/Kg		99	75 - 120	0	30
Styrene	1000	981		ug/Kg		98	76 - 120	0	30
Tetrachloroethene	1000	1080		ug/Kg		108	73 - 120	1	30
Toluene	1000	1010		ug/Kg		101	71 - 120	1	30
trans-1,2-Dichloroethene	1000	1070		ug/Kg		107	71 - 126	0	30
trans-1,3-Dichloropropene	1000	999		ug/Kg		100	66 - 122	0	30
Trichloroethene	1000	983		ug/Kg		98	72 - 120	1	30
Trichlorofluoromethane	1000	933		ug/Kg		93	49 - 120	1	30
Vinyl chloride	1000	877		ug/Kg		88	52 - 120	1	30
Xylenes, Total	3000	2980		ug/Kg		99	75 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*54 - 135*
4-Bromofluorobenzene (Surr)	*94*		*50 - 131*
Dibromofluoromethane (Surr)	*99*		*50 - 141*
Toluene-d8 (Surr)	*96*		*52 - 141*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-680690/8
Matrix: Solid
Analysis Batch: 680690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate			5000	6440	*+	ug/Kg		129	68 - 128	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*54 - 135*
4-Bromofluorobenzene (Surr)	*90*		*50 - 131*
Dibromofluoromethane (Surr)	*95*		*50 - 141*
Toluene-d8 (Surr)	*93*		*52 - 141*

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: 180-193270-B-1 DU
Matrix: Solid
Analysis Batch: 500100

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	71			70.8		%				0.3	10

QC Association Summary

Client: Allegheny County Sanitary Authority
Project/Site: Quarterly Unlimed Sludge

Job ID: 180-193450-1
SDG: 250722015

GC/MS VOA

Prep Batch: 679338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193450-1	250722015-01	Total/NA	Solid	5035	
180-193450-1 - RA	250722015-01	Total/NA	Solid	5035	

Analysis Batch: 660064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193450-1	250722015-01	Total/NA	Solid	8260D	679338
MB 410-680064/13	Method Blank	Total/NA	Solid	8260D	
LCS 410-680064/6	Lab Control Sample	Total/NA	Solid	8260D	
LCS 410-680064/8	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-680064/7	Lab Control Sample Dup	Total/NA	Solid	8260D	
LCSD 410-680064/9	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 660690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193450-1 - RA	250722015-01	Total/NA	Solid	8260D	679338
MB 410-680690/10	Method Blank	Total/NA	Solid	8260D	
LCS 410-680690/5	Lab Control Sample	Total/NA	Solid	8260D	
LCS 410-680690/7	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 410-680690/6	Lab Control Sample Dup	Total/NA	Solid	8260D	
LCSD 410-680690/8	Lab Control Sample Dup	Total/NA	Solid	8260D	

General Chemistry

Analysis Batch: 500100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-193450-1	250722015-01	Total/NA	Solid	SM 2540G	
180-193270-B-1 DU	Duplicate	Total/NA	Solid	SM 2540G	

CHAIN OF CUSTODY RECORD

Allegheny County Sanitary Authority
3300 Preble Avenue – Pittsburgh, PA 15233
Phone: (412) 766-4810 FAX: (412) 732-8023

ALCOSAN LIMS ID: **250722015**

Additional Information : Quarterly Unlimed Sludge

*Refrigerate VOA to <6C

ALCOSAN LIMS Sample ID	Sample Date	Sample Time	Matrix	Preserved (Y/N)	Comp / Grab (C or G)	Comments	Tests to be Performed: VOA EPA 8260D *	Total Solids					
							Number of Containers						
250722015-01	7/21/25	0626	S	N	G	Always maintain sample/extract at	8	2	JT #20	2.8 -0.8 2.0			
						25°C when reading any pH result.							
						Solids must be analyzed by 2540G.							
						All methods must be accredited by							
						PADEP or NELAC.							
						Email a copy of LIMS login with signed							
						COC as soon as possible after receipt.							
						Report Level II data package.							
						Document ASTM Extraction date/time							
						And out of hold extraction on report.							

180-193450 Chain of Custody

Relinquish Information

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	ALCOSAN	7 22 25	12:50		EUROFINS	7-22-25	1250
	EPTNE	7-22-25	1330				

COC Analyst Cooler Review: Initials: Date: 7-22-25 Supervisor Review: Initials: Date: 7 22 25

Page 1 of 1

Eurofins Pittsburgh
301 Alpha Drive RIDC Park
Pittsburgh, PA 15238
Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Brown, Shell	Carrier Tracking No(s): N/A	COC No: 180-542568.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Shell.Brown@et.eurofinsus.com	State of Origin: Pennsylvania	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - Pennsylvania		Job #: 180-193450-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 8/4/2025			Preservation Codes: -
City: Lancaster	TAT Requested (days): N/A			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Quarterly Unlimed Sludge	Project #: 18007110			
Site: N/A	SSOW#: N/A			Other: N/A

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D/5035FP_GalcAlcosan Volatile List	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X		X	
250722015-01 (180-193450-1)	7/21/25	06:26 Eastern	G	Solid			X	8	

Note: Since laboratory accreditations are subject to change, Eurofins Pittsburgh places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Pittsburgh laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Pittsburgh attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Pittsburgh.

Possible Hazard Identification *Unconfirmed*	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	7-23-25 1400	EP:HNE	[signature]	23July25 1500	ELLE
[signature]	23July25 1900	ELLE	[signature]		
[signature]			[signature]	7/23/25 1900	[signature]

Custody Seals Intact: ☑ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: R: 4.4 C45

TM

Ver: 10/10/2024

8/5/2025

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-193450-1
SDG Number: 250722015

Login Number: 193450
List Number: 1
Creator: Abernathy, Eric L

List Source: Eurofins Pittsburgh

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Allegheny County Sanitary Authority

Job Number: 180-193450-1
SDG Number: 250722015

Login Number: 193450
List Number: 2
Creator: McDonald, Telgan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 07/24/25 01:05 AM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

APPENDIX C TO SCOPE OF SERVICES

PA DEP GENERAL PERMIT

[See Attached]

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CLEAN WATER PROGRAM
400 Waterfront Drive
Pittsburgh, PA 15222

October 9, 2018

Robert A. Martire
Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233-1092

Re: Beneficial Utilization of Sewage Sludge
Permit ID No. PAG-086101
City of Pittsburgh
Allegheny County

Dear Mr. Martire:

This Notice of Intent (NOI) submitted for coverage of your sewage sludge treatment facility under General Permit PAG-086101 was reviewed by DEP and coverage is granted as specified in the enclosed general permit.

Please note that **your coverage under this statewide permit will not expire**. Your coverage under the PAG-08 General Permit is automatically extended for the duration of the final renewed, reissued or amended PAG-08 General Permit. When the statewide General Permit is renewed, the permit will be published in the Pennsylvania Bulletin. Following publication of the final renewed PAG-08 General Permit, you must comply with the terms and conditions of the renewed General Permit PAG-08 or otherwise submit an application for an individual permit. You are not required to submit an NOI to renew your coverage unless you receive notification from DEP to do so.

The Department requests that when applying biosolids as authorized pursuant to this approval that you provide timely and prior notification to the local municipality where such application is to be made. In addition to notifying the Department and the County Conservation District at least 30 days prior to the first application, all the landowners adjacent to the site must be notified in writing. We also request that you include a copy of the adjacent landowner fact sheet with this written notification.

Chapter 93 regulations should be referenced to determine if a proposed site is located in an Exceptional Value (EV) watershed. Watershed reclassification may have taken place. Contact DEP to verify that proposed sites are not in an EV watershed. Land application activities covered by a general permit are not allowed to discharge to a surface water classified as an EV water (25 Pa Code §92a.54(a)(8)). Stream designations are updated periodically. The latest revisions to Chapter 93 can be found on the web by going to www.pacode.com. Use the browse tool to select Title 25 then locate Chapter 93.

Persons land applying sewage sludge under this general permit are required to complete a land application training course within one year from the beginning of land application activities. In the case

of a permittee who prepares sewage sludge for land application, at least one person with responsibility for the land application of sewage sludge must complete the training.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa.C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD. IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.

If you have any questions regarding this approval, please call James Vanek at (412) 442-4031.

Sincerely,

Chris Kriley, PE
Program Manager
Clean Water Program

Enclosure

cc: ACHD
Regional
Central
J. Vanek

3800-PM-BPNPSM0340 Rev. 5/2015
Permit

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

APPROVAL FOR COVERAGE UNDER THE GENERAL PERMIT (PAG-08) FOR BENEFICIAL USE OF BIOSOLIDS BY LAND APPLICATION

PERMIT NO: PAG-086101

In accordance with the provisions of the Federal Clean Water Act (33 U.S.C.A §§1251-1387), the Clean Streams Law (35 P.S. §§691.1 - 691.1001), Sections 1905-A, 1917-A and 1920-A of the Administrative Code of 1929 (71 P.S. §§510-5, 510-17 and 510-20), the Solid Waste Management Act (35 P.S. §§6018.101 - 6018.1003), and the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. §§4000.101 - 4000.1904), the Department of Environmental Protection (DEP) hereby approves the Notice of Intent (NOI) submitted for coverage by:

INSERT APPLICANT NAME AND ADDRESS BELOW	INSERT FACILITY NAME AND ADDRESS BELOW
Allegheny County Sanitary Authority	ALCOSAN STP
3300 Preble Avenue	3300 Preble Avenue
Pittsburgh, PA 15233-1092	Pittsburgh, PA 15233-1092

to beneficially use biosolids that will be land applied in the Commonwealth of Pennsylvania. Approval of coverage for the land application of biosolids generated at this facility is subject to DEP's enclosed General Permit (PAG-08) which incorporates several standards including, but not limited to, general requirements, pollutant limitations, management practices, operational standards, pathogen and vector attraction reduction requirements, and other terms and conditions for biosolids prepared at the facility and that will be land applied in the Commonwealth.

All recordkeeping, monitoring and reporting requirements specified in this General Permit and DEP's approval for coverage under this General Permit shall apply to all beneficial uses of biosolids generated at the facility.

APPROVAL FOR COVERAGE UNDER THE GENERAL PERMIT IS AUTHORIZED BEGINNING ON July 24, 2017. WHEN THE GENERAL PERMIT IS RENEWED, REISSUED OR MODIFIED, THE FACILITY OR ACTIVITY COVERED BY THE APPROVAL FOR COVERAGE MUST COMPLY WITH THE FINAL RENEWED, REISSUED OR MODIFIED GENERAL PERMIT.

COVERAGE APPROVAL DATE: 19 OCT 2018

BY: Chris Kriley, PE
Printed Name

TITLE: Clean Water Program Manager

REGION: Southwest Regional Office

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

GENERAL PERMIT
FOR
BENEFICIAL USE OF BIOSOLIDS BY LAND APPLICATION

PERMIT NO: PAG-08

In accordance with the provisions of the Federal Clean Water Act (33 U.S.C.A §§1251-1387), the Clean Streams Law (35 P.S. §§691.1 - 691.1001), Sections 1905-A, 1917-A and 1920-A of the Administrative Code of 1929 (71 P.S. §§510-5, 510-17 and 510-20), the Solid Waste Management Act (35 P.S. §§6018.101 - 6018.1003), and the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. §§4000.101 - 4000.1904), the Department of Environmental Protection (DEP) issues this General Permit for use by eligible persons for beneficial use of biosolids that will be land applied, who are required in Title 25 Pa. Code Chapters 91, 92a, or 271, as applicable, to obtain a permit for beneficial use of biosolids in the Commonwealth of Pennsylvania. This General Permit shall only be valid for eligible persons who have submitted an administratively complete and acceptable NOI application to DEP on the prescribed form.

The approval for coverage under this General Permit is subject to several standards including, but not limited to, general requirements, pollutant limitations, management practices, operational standards, pathogen and vector attraction reduction requirements, and other terms and conditions for biosolids prepared at the facility that will be land applied in the Commonwealth.

Persons who prepare biosolids to be land applied and are seeking approval for coverage under this General Permit must submit a complete NOI in accordance with the requirements of this General Permit, using an NOI form provided by DEP (or photocopy thereof), and receive approval from DEP for coverage under this General Permit.

Persons who prepare biosolids that meet the eligibility requirements in Section A, Biosolids Quality, of this General Permit and who submit a timely, administratively complete and acceptable NOI to DEP are authorized, upon DEP's written approval, to beneficially use biosolids by land application, as specified in this General Permit.

1. Contents of NOIs

Persons seeking approval for coverage under this General Permit must submit a completed NOI form, provided by DEP (or photocopy thereof). The NOI form shall be signed in accordance with Section K (Signatory Requirements) of this General Permit and shall include the information specified in the NOI form and in the instructions for completing the form. The NOI form and instructions (3800-PM-WSFR0337) are available on DEP's website at www.dep.state.pa.us .

2. Where to Submit

NOIs or modifications to NOIs are to be submitted to the appropriate regional office of DEP having jurisdiction over the wastewater treatment plant or processing facility that produces the biosolids. NOIs for facilities located outside the Commonwealth are to be submitted to DEP's Bureau of Point and Nonpoint Source Management in Harrisburg. The NOI form and a list of DEP names, addresses and telephone numbers are included with the instructions for completing the NOI form.

3. Uses Not Covered Under This General Permit

The following beneficial uses of biosolids are not covered by this General Permit:

a. Land application of biosolids in watersheds classified as "Exceptional Value (EV)" in Title 25 Pa. Code Chapter 93;

b. Land application of biosolids that are not, or will not be, in full compliance with the requirements, terms or conditions of this General Permit;

c. Land application of biosolids for beneficial use that was produced by a person who has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit, schedule of compliance or order issued by DEP;

d. Land application of biosolids for beneficial use for which DEP determines an individual permit is required to ensure compliance with the Clean Water Act, the Clean Stream Law, or the Solid Waste Management Act and rules and regulations promulgated thereto;

e. Land application of biosolids for beneficial use that would adversely affect a listed endangered or threatened species or its critical habitat;

f. The beneficial use of biosolids mixed with residual waste, including food processing waste, unless the residual waste is authorized for beneficial use via a general permit or determined to be a coproduct as stated in Section A.5. of this General Permit; and

DEP may deny approval of coverage under this General Permit and require submittal of an application for an individual permit based on a review of the NOI or other information submitted or otherwise available to DEP.

4. Applicability

The authority granted by this General Permit is subject to the following additional requirements:

a. DEP may require the permittee to apply for and obtain an individual permit for the beneficial use of biosolids by land application. Any interested person may petition DEP to take action under this paragraph. DEP will require any person covered under this General Permit to apply for an individual permit only after the person has been notified in writing that such permit application is required. This notice shall include the following: (1) a brief statement of the reasons for this decision; (2) an individual permit application form; and (3) a statement setting a deadline for the person to file the application.

b. The permittee may request to be excluded from the coverage under this General Permit by applying for an Individual Generator Permit. The permittee shall submit an Individual Generator Permit application on an approved *Individual Generator Permit for the Beneficial Use of Biosolids by Land Application* form (3800-PM-WSFR0030), available on DEP's website, to DEP. The request may be granted by issuance of an Individual Generator Permit if the permit application otherwise meets the administrative, technical and legal requirements for issuance of the permit.

c. When an Individual Generator Permit is issued to a person otherwise subject to this General Permit, the coverage under this General Permit is automatically terminated on the effective date of the Individual Generator Permit. When an Individual Generator Permit is denied to the person otherwise subject to this General Permit, the person may continue land application for beneficial use of biosolids if all eligibility requirements under this General Permit are met and the person is not prohibited from this General Permit coverage. If the person does not meet the eligibility requirements of this General Permit, or is otherwise prohibited from general permit coverage, approval of coverage under this General Permit automatically terminates on the date of such denial, unless otherwise specified by DEP.

d. (i) Renewal of Existing Coverage Under This General Permit:

Application for renewal of coverage under this General Permit must be submitted to DEP **at least 180 days prior to** the expiration date of coverage indicated on the approval for coverage form (unless written permission has been granted by DEP for submission at a later date). A request for renewal of coverage is to be made using the *Pennsylvania Notice of Intent (NOI) for Coverage Under General Permit for Beneficial Uses of Biosolids by Land Application* (3800-PM-WSFR0337b) available on DEP's website.

In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit or approval for coverage before its current coverage expiration date, the terms and conditions of the approved coverage will automatically continue and will remain fully effective and enforceable pending the approval or denial of the request for renewal of permit coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of this General Permit.

(ii) Issuance, Reissuance or Amendment of This General Permit:

Unless extended by DEP, this General Permit will expire 5 years from the date of its issuance. DEP will publish a notice in the *Pennsylvania Bulletin* of the draft, renewed or reissued general permit or of any amendments to this General Permit, and after a comment period, notice of the final, renewed, reissued or amended general permit will be published in the *Pennsylvania Bulletin.* The permittee shall be responsible for complying with the final renewed, reissued or amended general permit.

e. This General Permit may be modified or revoked or reissued or terminated for cause by DEP prior to expiration of this General Permit if there is evidence indicating known or potential adverse impacts to public health or the environment, or if the biosolids cannot be adequately regulated under the provisions of this General Permit, in which case the permittee may be required to obtain an individual permit.

f. If there is a conflict between the approval of the application for coverage, its supporting documents and/or amendments, and the terms and conditions of this General Permit, the terms and conditions of this General Permit shall govern.

g. Failure to comply with the terms and conditions of this General Permit is grounds for any one or more of the following: enforcement action, permit coverage termination, permit coverage revocation and reissuance, or denial of a permit coverage renewal application. In particular, in appropriate cases where DEP has validated that malodors from a particular biosolids source has caused a persistent public nuisance, DEP may require the generator to develop and implement a Biosolids Quality Enhancement Plan (BQEP) or revise their existing BQEP, focusing on odor mitigation, to retain or obtain coverage under this General Permit. DEP may require as part of the BQEP that the generator adopt practices that include, but not limited to soil incorporation, storage restrictions, and more stringent VAR practices. Soil incorporation shall not be required if it violates the farm's soil conservation plan or erosion and sedimentation control plan, if application involves top-dressing on a hay field, or if it would otherwise increase the risk of the biosolids migrating off the site. DEP may also revoke facility coverage under this General Permit if the treatment category or an individual facility is unable to mitigate its documented and persistent nuisance odor situations.

h. This General Permit does not constitute approval or authorization to construct a facility or make modifications to existing facilities necessary to meet the requirements of this General Permit. The permittee shall comply with all permitting and other requirements as necessary.

i. No condition of this General Permit shall release the permittee from any responsibility or requirement under any other Federal or Pennsylvania statute or regulation. Nor shall any condition of this General Permit release the permittee from any responsibility or requirement under any local regulation or ordinance, provided that the local regulation or ordinance is not inconsistent with or more stringent than any provision of Title 25 Pa. Code Chapter 271 or any other applicable statute and regulation.

j. Coverage under this General Permit is an approval to apply biosolids to the land for beneficial use(s) only.

This General Permit (PAG-08) for Beneficial Use of Biosolids by Land Application is issued April 3, 2009, and shall expire at midnight April 2, 2014, unless extended on or before the expiration date by DEP.

General Permit
(PAG-08)
Date Issued: **April 3, 2009**
Extended To: **April 2, 2019**

By _____
Director
Bureau of Point and Nonpoint Source Management

PERMIT REQUIREMENTS

This General Permit establishes standards including, but not limited to, general requirements, pollutant limits, management practices, operational standards, pathogen and vector attraction reduction requirements, terms and conditions for the biosolids that will be land applied. The requirements of applicable regulations and this General Permit shall apply to, and be enforceable against, persons operating under this General Permit who prepare biosolids or who land apply biosolids prepared under this General Permit. References to sections beginning with §271, §285, or §287 refer to regulations outlined in Title 25 Pa. Code Chapters 271, 285, and 287 respectively unless otherwise noted.

A. Biosolids Quality

The permittee shall comply with the following requirements, at all times, when producing biosolids and beneficially applying those biosolids to the land.

1. The biosolids cannot exceed the ceiling concentration for any pollutant as specified in §271.914(b)(1), (Table 1, Ceiling Concentrations).
2. (a) The biosolids must meet one of the Class A pathogen reduction requirements as specified in §271.932(a); **OR**

   (b) The biosolids must meet one of the Class B pathogen reduction alternatives as specified in §271.932(b) and related site restrictions in §271.932(b)(5).
3. The biosolids must meet one of the vector attraction reduction (VAR) requirements as specified in §271.933.
4. A *Biosolids Quality Enhancement Plan* (BQEP), available on DEP's website, must be developed in accordance with §271.921. DEP's BQEP publication should be used as a guide in the development of the BQEP. The BQEP must evaluate options for improving product quality. The BQEP must be maintained on the premises where the biosolids are prepared for inspection by a representative of DEP or submitted to DEP upon request. The plan shall be available no later than 1 year after receiving initial coverage under the general permit. The BQEP shall be submitted with any subsequent renewals for coverage under a general permit.

   The permittee must review the BQEP every 5 years or as requested by DEP and update it as necessary to address significant changes.
5. When mixing residual materials, such as cement kiln dust, with sewage sludge or biosolids in order to produce a biosolids product that is to be beneficially used, the residual materials must be authorized for beneficial use via a general permit or be determined to be a coproduct as defined in §287.1 (relating to definitions) and meet the requirements under §287.8 (referring to coproduct determinations) or §287.9 (relating to industry-wide coproduct determinations) prior to mixing. If the residual material is approved for beneficial use via a general permit, a copy of the general permit authorizing the beneficial use of the residual material must be submitted with the NOI. If the residual material is considered a coproduct, then either a letter from DEP indicating concurrence with the coproduct determination or a detailed description of the residual waste to be used, its benefits to the biosolids product, the required analyses and documentation necessary to verify the residual material meets the requirements of a coproduct must be submitted with the NOI application.
6. DEP approval is required for changes made to the biosolids treatment process that will impact the VAR option and/or the pathogen reduction alternative originally approved under the permittee's general permit coverage approval. The permittee must submit supporting documentation for the new process, VAR option and/or pathogen alternative to the appropriate DEP office. DEP staff may approve modifications covered under the general permit by a letter to the permittee.
7. Food processing waste shall not be mixed with biosolids unless approved by DEP prior to application. DEP may revoke approval of mixed biosolids/food processing waste if DEP determines that the mixture has produced malodors that have caused a persistent public nuisance.

B. Sampling and Analysis

A person who operates under this General Permit shall comply with the following when sampling and analyzing biosolids intended for land application.

1. Sampling

   Any samples and measurements taken to monitor biosolids quality and process controls must be representative of the monitored activity and in accordance with §271.906 and the facility's Sampling Plan submitted with the NOI. The most current version of DEP's *Biosolids Sampling Manual* should be used as a guide.

2. Analytical Test Methods

   Methods listed in §271.906, the most current version of DEP's *Biosolids Sampling Manual*, or in any later amendments published in the Federal Register are incorporated by reference and shall be used to analyze samples of biosolids. No other methods may be used without prior written approval from DEP. Requests for approval must be submitted in writing to DEP.

   When pH adjustment is used for either VAR or pathogen reduction, the pH readings must be temperature corrected to 25 degrees Celsius.

C. Frequency of Monitoring for Biosolids Quality

1. Monitoring for the pollutants, pathogen density, and vector attraction reduction requirements in §271.933(b)(1)-(8) shall, at a minimum, be at the following frequency.

Frequency of Monitoring

Amount of biosolids[1] dry tons (dry metric tons) per 365 day period	Frequency[2]
Greater than zero but less than 319 (290)	Once per year
Equal to or greater than 319 (290) but less than 1,650 (1,500)	Once per quarter (four times per year)
Equal to or greater than 1,650 (1,500) but less than 16,500 (15,000)	Once per 60 days (six times per year)
Equal to or greater than 16,500 (15,000)	Once per month (12 times per year)

[1]Either the amount of biosolids land applied or the amount of biosolids generated to be land applied for beneficial use or the amount of biosolids received by a person who prepares biosolids for land application.

[2]Frequency is based on a 365-day period.

2. The permittee must verbally notify DEP immediately but no longer than 24 hours after becoming aware of non-compliance with any biosolids quality standard relating to pathogen reduction, vector attraction reduction, or pollutant concentration. The permittee must also provide a written report to DEP within 5 days of the verbal report. The written report must include the date of the noncompliance incident, the nature of the incident, the actions taken to mitigate the problem, and the date the activity returned to compliance.

D. Notification Requirements

1. A person who operates under this General Permit shall comply with the following notification requirements:
   a. Obtain written consent of the landowner and provide information to the landowner or occupant as prescribed in §271.913(e), (f) and (m).
   b. Provide notification to adjacent landowners in accordance with §271.913(g). DEP recommends that a copy of the most current version of DEP's *Understanding Biosolids Land Application in Your Community* fact sheet, available on DEP's website, be provided with the notification letter.
   c. Provide Notification of First Land Application (30-Day Notice) to the county conservation district and DEP in accordance with §271.913(g) on forms provided by DEP.
   d. Obtain or provide information as required by §271.913(i), (k) and (l).
2. Upon receipt of the Notification of First Land Application, DEP will be responsible for the following activities:
   a. The appropriate regional DEP office will review the site and make a determination on whether the site meets the regulatory requirements for land application of biosolids. A land application site will only be deemed suitable if it meets applicable site suitability requirements.
   b. Notification of site suitability will be sent to the municipality in which the site is located and will be published in the *Pennsylvania Bulletin*.
   c. Land application activities may commence at the end of the 30-day timeframe even if DEP has not made a determination.
3. As per §271.913(g)(2), when using biosolids on active mine sites for mine reclamation purposes, the notification procedures for the reclamation activities must conform to the notification requirements set forth by the DEP's technical guidance document 563-2000-602 entitled "Beneficial Use of Sewage Sludge at Active Mine Sites."

E. Land Application Requirements

Any person who operates under this General Permit shall comply with the following land application requirements:

1. Comply with cumulative pollutant loading rate requirements as specified in §271.913(b) and related requirements in §271.913(j) and §271.919(2). The determination of past cumulative pollutant loading rates should be based on existing and readily available information for biosolids, excluding exceptional quality and residential septage, applied to the site since September 7, 1980.
2. Conduct background soil chemical analyses as specified in §271.913(h). If the background soil analyses are equal to or exceed the pollutant values listed in Appendix 1 for any pollutant, that field cannot receive additional applications of biosolids unless the biosolids meet the monthly average pollutant concentrations specified in Table 3 of §271.914(b)(3).
3. Comply with applicable sections of Title 25 Pa. Code Chapter 285 (relating to storage, collection, and transportation of municipal waste).
4. The person who land applies biosolids under this General Permit must display the permit number on the sides and rear of each land application vehicle, in numbers at least 3 inches (or 7.6 centimeters) high in a color contrasting to the background.

F. Land Application Restrictions

1. A person who operates under this General Permit shall comply with the following land application restrictions.
   a. Biosolids may not be applied to the land if the practice is likely to adversely affect a Federal or Pennsylvania threatened or endangered species, or its designated critical habitat, listed under or pursuant to the Endangered Species Act, 16 U.S.C. §1533, the Fish and Boat Code, 30 Pa. C.S.A. §2305, or the Game and Wildlife Code, 34 Pa. C.S.A. §101 *et seq.*
   b. Biosolids may not be applied to a site that is flooded, frozen, or snow-covered, except as expressly provided in a permit issued under Title 25, Chapters 91, 92a, or 105, as applicable.
   c. Biosolids may not be applied to the land at a rate that is greater than the agronomic rate, unless a greater rate is approved for land reclamation. Agronomic rates must be calculated in accordance with the most current version of DEP's *Biosolids Training Manual.* The Penn State Agronomy Guide, documented yields, or other applicable information sources may be used to determine appropriate yields and nutrient needs for the purposes of calculating application rates. The source(s) used to calculate rates must be provided with the example calculations provided with the NOI or 30-Day Notice, as appropriate.
   d. Biosolids may not be applied at a farm if the nitrogen available from the manure produced by animals at the farm satisfies the nutrient needs of the farm for realistically expected crop yields, <u>unless</u> a management plan is implemented that allows for uses of the manure other than land application on that farm.
   e. Biosolids must be applied to the land in accordance with the setback and slope requirements of §271.915(c) and (d).
   f. Biosolids may not be applied in an area that does not have an implemented erosion and sedimentation control plan or a farm conservation plan.
   g. The soil pH must be as specified in §271.915(e).
2. A person who operates under this General Permit must comply with the following requirements in addition to the applicable restrictions in Section F.1. when land applying biosolids on a land reclamation site.
   a. The reclamation activity must be permitted or otherwise approved by DEP.
   b. Biosolids may not be applied on slopes that exceed 35 percent, unless otherwise approved in writing by DEP.
   c. Biosolids may not be applied at a rate that is greater than the agronomic rate, unless a greater rate is approved in writing by DEP for reclamation activities.
   d. Biosolids land applied to a reclamation site shall be incorporated into the soil within 24 hours of the land application.

G. Storage Requirements

1. Any person operating under this General Permit must comply with the following requirements when storing biosolids at the land application site for greater than 7 days:

   a. Storage sites may not be located within 300 feet of an occupied dwelling, unless written waiver is provided by the current owner, or in the areas listed in §275.202 and §275.312(3) as referenced in §285.134(3).

   b. Storage may not be located on slopes greater than 3 percent unless otherwise approved by DEP.

   c. The storage of biosolids must not create conditions that are conducive to the harboring, breeding, or attraction of vectors.

   d. Storage amounts are limited to the amount of material necessary to meet the calculated agronomic application rate for the permitted site. In the case of mine reclamation, storage amounts are limited to the calculated reclamation rate as approved to cover the permitted application area.

   e. Storage area designs must be sent to the appropriate DEP office for written approval prior to installation.

   f. The location of the storage areas must be shown on the land application site map and submitted to the appropriate DEP office prior to installation.

   g. Appropriate best management practices (BMPs) must be implemented to minimize run-on and runoff.

   h. When in use, storage areas must be inspected regularly and after severe precipitation events to ensure run-on and runoff controls are in good working order. Inspections should be logged documenting the time, date, inspector, conditions of the site, and any mitigation measures taken.

   i. When necessary, structures should be utilized to collect runoff or leachate from the storage area. Any water collected from the storage area should be removed to a treatment facility, sprayed back onto the biosolids piles, or applied on-site to areas included under the 30-Day Notice or other land application permit.

   j. If the storage area requires earth disturbance, such as in the construction of berms, the applicable best management practices (BMPs) as indicated by Chapter 102 should be utilized. These BMPs can be part of or be an amendment to the existing farm conservation or erosion and sedimentation plan. If no plan exists, a plan meeting the Chapter 102 requirements may be required.

   k. Biosolids must meet one of the VAR options listed in §271.933(b)(1)-(8) prior to storing unless otherwise approved by DEP.

   l. DEP may require additional criteria based on storage length and site conditions.

2. Staging areas for biosolids must meet the requirements for land application as listed in §271.915(a), (c), (d), and (e) unless otherwise approved by DEP.

H. Training

Training obligations must be completed as required by §271.915(j).

I. Recordkeeping and Reporting

Any person operating under this General Permit must comply with the following recordkeeping and reporting requirements:

1. For persons who prepare biosolids.

   a. The person who prepares biosolids must develop the information specified in §271.918(a)(1) and §271.918(a)(2)(i) and complete Part I of the *Recordkeeping and Reporting Form* (3800-FM-WSFR0340a), available on DEP's website.

   b. A copy of the certification statement in Part I of the *Recordkeeping and Reporting Form* must be provided to the land applier.

   c. A signed copy of the *Recordkeeping and Reporting Form* and other supporting data must be submitted to DEP annually on or before March 1 for activities conducted during the previous calendar year.

   d. This information must be retained for a period of 5 years.

2. For persons who land apply biosolids.

   a. The person who land applies biosolids must develop the information specified in §271.918(a)(2)(ii) and complete Part II of the *Recordkeeping and Reporting Form* provided by DEP.

   b. The information specified in §271.918(a)(2)(ii)(A)-(G) shall be retained indefinitely. Under Chapter 271, 30 years of retention of a record is considered to be in compliance with this requirement.

   c. The information specified in 271.918(a)(2)(ii)(H)-(M) shall be retained for 5 years.

   d. A signed copy of the *Recordkeeping and Reporting Form* and other supporting data must be submitted to DEP as specified.

3. Notification of the date, time and location at which land application will occur, when requested by DEP, for the purpose of inspection or investigation to ascertain compliance with terms and conditions of this General Permit and with applicable statutes, rules and regulations.

J. Right of Entry for Inspection

A person operating under this General Permit shall allow authorized representatives of the Commonwealth, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to make copies of records or have access to the facility where biosolids is generated or areas for which the permit holder is responsible in which the activities covered by this General Permit will be, are being, or have been conducted to ensure compliance with the Clean Streams Law or the Solid Waste Management Act, and regulations promulgated thereunder, and this General Permit. Samples may be taken of solid, semisolid, liquid or contained gaseous material for analysis.

K. Signatory Requirements

All signatures required to comply with this General Permit must be signed as follows:

1. For a municipality, or a State, Federal, or other public agency:

   By either a principal executive officer, ranking elected official, or other authorized employee. For purposes of this General Permit, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. In the case of corporations, by a principal executive officer of at least the level of vice president, or an authorized representative.

3. In the case of a partnership, by a general partner.

4. In the case of a sole proprietorship, by the proprietor.

5. All reports required by this General Permit and other information requested by DEP shall be signed by a person described in Section K.1. – 4. above or by a duly authorized representative of that person.

   A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described above and the authorization is submitted to DEP with the records.

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or process, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for the environmental matters for the facility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

6. Changes in Signatory Authorization.

   If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section K (Signatory Requirements) must be submitted to DEP prior to or together with any records, information, or applications to be signed by an authorized representative.

L. Notification of Withdrawal by the Permittee

When coverage under this General Permit is withdrawn, the following information should be submitted to DEP.

1. A notification of withdrawal that includes:
   a. Name, mailing address, and location of the facility for which the notification is submitted.
   b. The permittee's name, address, telephone number, ownership status and status as federal, state, private, public or other entity.
   c. The general permit number for the beneficial use of biosolids by land application identified by the notice of withdrawal.
2. A completed *Recordkeeping and Reporting Form* for the current year's activities.
3. The following certification signed in accordance with Section K (Signatory Requirements) of this General Permit:

   "I certify under penalty of law that all land application of biosolids from the identified facility that is authorized by this General Permit has ceased. I understand that by submitting this notice of withdrawal I am no longer authorized to land apply biosolids under PAG-08 (insert permit coverage number) and that land application of biosolids without a permit is unlawful under the Clean Streams Law and the Solid Waste Management Act."

M. Responsibilities

1. Duty to Comply

   The permittee must comply with all terms and conditions of this General Permit and all renewals and reissuances thereof. Any permit noncompliance constitutes a violation of the Federal Clean Water Act, the Pennsylvania Clean Streams Law or the Solid Waste Management Act and constitutes grounds for enforcement action, including but not limited to, civil and criminal penalties, termination of coverage, denial of coverage renewal, or denial of an application for an individual permit.

2. Need to Halt or Reduce Activity Not a Defense

   The permittee may not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this General Permit.

3. Penalties and Liability.

   Nothing in this General Permit shall be construed to relieve the permittee of civil or criminal penalties for non-compliance pursuant to Sections 602 or 605 of the Clean Streams Law (35 P.S. §§691.602 or 691.605) and the Federal Clean Water Act.

4. Property Rights

   The approval of coverage under this General Permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

5. Severability

   The provisions of this General Permit are severable, and if any provision of this General Permit, or the application of any provision of this General Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this General Permit shall not be affected thereby.

6. Duty to Reapply

   If the permittee wishes to continue an activity regulated by this General Permit after the expiration date of approval for coverage under this General Permit, the permittee shall submit a timely and administratively complete request for renewal of approval at least 180 days prior to the expiration date specified in the approval of coverage under this General Permit, unless permission is granted by DEP to submit at a later date.

7. Duty to Provide Information
   a. The permittee shall furnish to DEP any information that DEP may request to determine whether cause exists for modifying, revoking or reissuing, or terminating this permit or coverage approved under this General Permit, or to determine compliance with this General Permit.

b. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this General Permit.

c. Where the permittee becomes aware that it fails to submit any relevant facts in a permit application, or has submitted incorrect information in an NOI or in any record to DEP, it shall promptly submit such facts or information to DEP. Submitting incorrect information or making any false statement, representation, or certification may result significant penalties including the possibility of fine and imprisonment.

d. The permittee must give advance notice to DEP of major changes (i.e., new industrial wastewater contributions) or expansions of the existing wastewater treatment plant or any planned physical alterations or additions to the permitted operation which could in any way affect the established quality of the biosolids covered under this General Permit. If such a change disqualifies the material as biosolids, the land application shall stop immediately.

8. Adverse Impacts

The permittee shall take all reasonable steps to minimize or prevent any adverse impact on the environment or human health resulting from noncompliance with this General Permit.

9. Transfer of Ownership or Control

a. No approval under this General Permit may be transferred unless the transfer is approved by DEP.

b. In the event of any pending change in control or ownership of facilities from which the authorized processes emanate, the permittee must submit to DEP an *Application for Transfer of Coverage Under a General Permit or Individual Permit* (3800-PM-WSFR0479) notifying DEP of such pending change at least 30 days before the proposed transfer date.

c. After receipt of the documentation described above, DEP shall notify the existing permittee and the new owner or controller of its decision concerning approval of the transfer.

10. Confidentiality of Records

Except for data determined to be confidential under §607 of the Clean Streams Law or Chapter 92a, all records prepared in accordance with the terms of this General Permit shall be available for public inspection at the offices of DEP. Monitoring data shall not be considered confidential.

N. Definitions

The following definitions apply only to this General Permit. Other definitions may be found in §271.1.

"Adjacent Landowner" - Includes all landowners whose deeds touch the deed for the parcel of land on which the biosolids will be applied.

"Agricultural Land" - Land on which a food crop, a feed crop, a fiber crop, a silvicultural crop, or a horticultural crop is grown. This includes range land and land used as pasture.

"Agronomic Rate" - The annual whole sludge application rate (dry weight basis) designed:

(1) To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, silvicultural crop, cover crop, horticultural crop, or vegetation grown on the land; and

(2) To minimize the amount of nitrogen in the biosolids that passes below the root zone of the crop or vegetation grown on the land to the groundwater.

"Biosolids" - Sewage sludge as defined by Title 25 Pa. Code §271.1 that meets, at a minimum, the pollutant quality standards listed in Title 25 Pa. Code §271.914(b)(1), one of the Class B pathogen reduction alternatives listed in §271.932(b), and one of the vector attraction reduction options listed in §§271.933 (b)(1)-(10).

"Biosolids mixed with residual waste"- Biosolids which has been mixed together with another residual waste product, including food processing waste, prior to land application or land applying biosolids and another residual waste product on the same site in the same crop year."

"Cumulative Pollutant Loading Rate" - The maximum amount of a pollutant that can be applied to an area of land.

"Food Processing Waste" – Residual materials in liquid and solid form generated in the slaughtering of poultry and livestock, or in processing and converting fish, seafood, milk, meat and eggs to food products. The term includes residual materials generated in the processing, converting, or manufacturing of fruits, vegetables, crops and other commodities into marketable food items. The term also includes vegetative residuals from food processing activities that are usually recognizable as part of a plant or vegetable, including cabbage leaves, bean snips, onion skins, apple pomace and grape pomace.

"Forest" - A tract of land thick with trees and underbrush.

"Frozen Ground" - Ground frozen to a depth of at least 2 inches for a period of 72 consecutive hours.

"Land Application" - The spraying or spreading of biosolids onto the land surface for beneficial use; the injection of biosolids below the land surface for beneficial use; or the incorporation of biosolids into the soil for beneficial use so that the biosolids can either condition the soil or fertilize crops for vegetation grown in the soil.

"Municipality" - A city, town, borough, county, township, or an authority created by any of the foregoing under state law, including an intermunicipal agency of two or more of the foregoing entities.

"Permit" - A permit issued by DEP to operate a municipal waste disposal or processing facility, or to beneficially use municipal waste. The term includes a general permit, permit modification, permit by rule, permit reissuance and permit renewal.

"Person" - Any individual, corporation, partnership, association, municipality, political subdivision, or any instrumentality of state, federal, or local government, or any agent or employee thereof; or any other legal entity.

"Person who operates under a general permit" - Includes the permittee or other agents for the permittee as applicable and the land applier.

"pH" - The logarithm of the reciprocal of the hydrogen ion concentration at 25 degrees Celsius.

"Pollutant" - An organic substance, an inorganic substance, a combination of organic substances, a pathogenic organism, or any other substance identified by DEP that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

"Pollutant Limit" - A numerical value that describes the amount of a pollutant allowed per unit amount of biosolids (e.g., milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (e.g., pounds per acre or kilograms per hectare); or the volume of a material that can be applied to a unit area of land (e.g., gallons per acre or liters per hectare).

"Public Contact Site" - Land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

"Public Nuisance" – a nuisance which affects numerous members of the public or the public at large, as distinguished from a nuisance which only does harm to a neighbor or a few private individuals.

"Reclamation Site" - Drastically disturbed land that is reclaimed using biosolids. This includes, but is not limited to, active and abandoned coal and non-coal surface mines and construction sites.

"Representative Sample" - A sample that, based on the specific biosolids operation and to the best of the generator's knowledge, adequately characterizes the quality and/or attributes of the biosolids produced at the permitted facility.

"Sewage Sludge" - Liquid or solid sludges and other residues from a municipal sewage collection and treatment system; and liquid or solid sludges and other residues from septic and holding tank pumpings from commercial, institutional or residential establishments. The term includes materials derived from biosolids. The term does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of sewage sludge at a municipal sewage collection and treatment system, or grit, screenings and nonorganic objects from septic and holding tank pumpings.

"Snow Cover" - Snow cover is defined as snow, which covers approximately 95 percent of the area to be used for land application of biosolids.

"Staging" - The placement of a biosolids product at an active land application site with the intention of land applying the material within the same day or up to and including 7 days.

"Storage" - The containment of any waste on a temporary basis in such a manner as not to constitute disposal of such waste. It shall be presumed that the containment of waste in excess of 1 year constitutes disposal. This presumption can be overcome by clear and convincing evidence to the contrary.

"Treat or Treatment of Sewage Sludge" - The preparation of biosolids for land application. This includes, but is not limited to, thickening, stabilization, and dewatering of biosolids. This does not include storage of biosolids.

"Vector Attraction" - The characteristic of biosolids that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

APPENDIX 1

Acceptable Soil Concentrations for Metals Derived from the Biosolids Risk Assessment*

Pollutant	Soil Concentration (mg/kg)
Arsenic	23.5
Cadmium	19.7
Copper	769
Lead	161
Mercury	8.6
Nickel	228
Selenium	50.21
Zinc	1454

*Numbers as published in Table 18 Column 6 of EPA's Guide to Biosolids Risk Assessments for the Part 503 Rule, September 1995.

APPENDIX D TO SCOPE OF SERVICES

OHIO NPDES PERMIT

[See Attached]

Ohio EPA Permit No.: 5IN00000*FD
Application No: PA0025984

Action Date: August 18, 2025
Effective Date: October 1, 2025
Expiration Date: September 30, 2030

Ohio Environmental Protection Agency
Authorization to Discharge Under the
National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

Allegheny County Sanitary Authority (ALCOSAN)

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to beneficially use biosolids generated by the ALCOSAN wastewater treatment works, located at 3300 Preble Avenue, Pittsburgh, Pennsylvania, in the State of Ohio in accordance with the conditions specified in Parts I, II, and III of this permit.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

John Logue
Director

Total Pages: 19

PART I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

1. Biosolids Monitoring. During the period beginning October 1, 2025, and lasting until September 30, 2030, the permittee shall monitor the treatment works' final sludge at Station Number 5IN00000581, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Biosolids Monitoring - 581 – Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
00611 - Ammonia (NH3) In Sludge - mg/kg	-	-	-	-	-	-	-	1/Month	Composite	All
00627 - Nitrogen Kjeldahl, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/Month	Composite	All
00668 - Phosphorus, Total In Sludge - mg/kg	-	-	-	-	-	-	-	1/Month	Composite	All
00938 - Potassium In Sludge - mg/kg	-	-	-	-	-	-	-	1/Month	Composite	All
01003 - Arsenic, Total In Sludge - mg/kg	75	-	-	-	-	-	-	1/Month	Composite	All
01028 - Cadmium, Total In Sludge - mg/kg	85	-	-	-	-	-	-	1/Month	Composite	All
01043 - Copper, Total In Sludge - mg/kg	4300	-	-	-	-	-	-	1/Month	Composite	All
01052 - Lead, Total In Sludge - mg/kg	840	-	-	-	-	-	-	1/Month	Composite	All
01068 - Nickel, Total In Sludge - mg/kg	420	-	-	-	-	-	-	1/Month	Composite	All
01093 - Zinc, Total In Sludge - mg/kg	7500	-	-	-	-	-	-	1/Month	Composite	All
01148 - Selenium, Total In Sludge - mg/kg	100	-	-	-	-	-	-	1/Month	Composite	All
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/Month	Total	All
70316 - Sludge Weight - dry Tons	-	-	-	-	-	-	-	1/Month	Total	All
70318 - Sludge Solids, Percent Total - %	-	-	-	-	-	-	-	1/Month	Composite	All

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
71921 - Mercury, Total In Sludge - mg/kg	57	-	-	-	-	-	-	1/Month	Composite	All
78465 - Molybdenum In Sludge - mg/kg	75	-	-	-	-	-	-	1/Month	Composite	All
99972 - Sludge Weight, to hybrid poplar tree farm - dry tons	-	-	-	-	-	-	-	1/Month	Total	All
99976 - Sludge Weight, to approved beneficial use sites - dry tons	-	-	-	-	-	-	-	1/Month	Total	All

Notes for Station Number 5IN00000581:

a. Monitoring data shall be reported on each Discharge Monitoring Report (DMR). Monitoring shall be performed prior to biosolids being removed from the facility for beneficial use/land application. The monitoring data can be collected at any time during the reporting period. It is recommended that composite samples of the biosolids be collected at the end of the sewage sludge treatment process and analyzed close enough to the time of beneficial use to be reflective of the biosolids current quality, but not so close that the results of the analysis are not available prior to land applying the biosolids.

b. For biosolids disposed of by hauling to an authorized landfill or transferred to another NPDES permit holder, metal and nutrient analysis is not required.

c. For biosolids that will be beneficially used, metal and nutrient analysis shall be completed during each reporting period even when biosolids are not removed from the facility for beneficial use during that reporting period. Alternatively, the number of composite samples collected and reported prior to the next beneficial use event shall be increased to account for the reporting period(s) in which beneficial use did not occur. If metal and nutrient analysis has not been completed during each reporting period, when biosolids are removed from the facility for beneficial use, all metal and nutrient analysis results shall be reported on the applicable DMR by entering the separate results on different days within the DMR.

d. If no biosolids are removed from the facility during the reporting period and no metal and nutrient analysis is completed during the reporting period, select the "No Discharge" check box on the data entry form and PIN the eDMR. If no biosolids are removed from the facility during the reporting period and metal and nutrient analysis is completed during the reporting period, enter the results for the metal and nutrient analysis on the DMR and report "0" for sludge weight and sludge fee weight.

e. Units of mg/kg are on a dry weight basis.

f. Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lb/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

g. Sludge fee weight means sludge weight, in dry U.S. tons, excluding any admixtures such as liming material or bulking agents.

h. See Part II, Items A - I.

PART I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

2. Sewage Sludge Monitoring. During the period beginning October 1, 2025, and lasting until September 30, 2030, the permittee shall monitor the treatment works' final sludge at Station Number 5IN00000586, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 586 – Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
51129 - Sludge Fee Weight - dry tons	-	-	-	-	-	-	-	1/Year	Total	December

Notes for Station Number 5IN00000586:

a. Monitoring is required when sewage sludge is removed from the permittee's facility for disposal in a municipal solid waste landfill. The total Sludge Fee Weight of sewage sludge disposed of in a municipal solid waste landfill for the entire year shall be reported on the December Discharge Monitoring Report (DMR).

b. If no sewage sludge is removed from the permittee's facility for disposal in a municipal solid waste landfill during the year, select the "No Discharge" check box on the data entry form and PIN the DMR.

c. Sludge fee weight means sludge weight, in dry U.S. tons, excluding any admixtures such as liming material or bulking agents.

d. Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lb/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

e. See Part II, Items A - I.

PART I, B. SLUDGE LIMITATIONS AND MONITORING REQUIREMENTS

3. Sewage Sludge Monitoring. During the period beginning October 1, 2025, and lasting until September 30, 2030, the permittee shall monitor the treatment works' final sludge at Station Number 5IN00000588, and report to the Ohio EPA in accordance with the following table. See Part II, OTHER REQUIREMENTS, for location of sludge sampling.

Table - Sludge Monitoring - 588 – Final

Effluent Characteristic	Discharge Limitations							Monitoring Requirements		
Parameter	Concentration Specified Units				Loading* kg/day			Measuring Frequency	Sampling Type	Monitoring Months
	Maximum	Minimum	Weekly	Monthly	Daily	Weekly	Monthly			
70316 - Sludge Weight - Dry Tons	-	-	-	-	-	-	-	1/Year	Total	December

Notes for Station Number 5IN00000588:

a. Monitoring is required when sewage sludge is removed from the permittee's facility for transfer to another Ohio NPDES permit holder. The total sludge volume transferred to another Ohio NPDES permit holder for the entire year shall be reported on the December Discharge Monitoring Report (DMR).

b. If no sewage sludge is removed from the permittee's facility for transfer to another Ohio NPDES permit holder during the year, select the "No Discharge" check box on the data entry form and PIN the DMR.

c. Sludge weight is a calculated total for the year. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lb/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

d. See Part II, Items A - I.

PART II - OTHER REQUIREMENTS

A. Description of the location of the required sampling stations are as follows:

Sampling Station	Description of Location
5IN00000581 in Ohio	Beneficial use of Class B biosolids
5IN00000586 in Ohio	Disposal of sewage sludge or biosolids in a municipal solid waste landfill
5IN00000588 in Ohio	Transfer of sewage sludge or biosolids to another NPDES permittee

B. All treatment, storage, transfer or disposal of sewage sludge or biosolids, or beneficial use of biosolids, by the permittee shall comply with Chapter 6111. of the Ohio Revised Code, Chapter 3745-40 of the Ohio Administrative Code, any further requirements specified in this NPDES permit, and any other actions of the Director that pertain to the treatment, storage, transfer or disposal of sewage sludge or biosolids, or beneficial use of biosolids by the permittee.

C. No later than March 1st of each calendar year, the permittee shall submit a report summarizing the sewage sludge disposal, use, storage, or treatment activities of the permittee during the previous calendar year. The report shall be submitted through Ohio EPA eBusiness Center, Division of Surface Water NPDES Permit Application service.

D. The permittee shall maintain standard operating procedures for how pathogen reduction and vector attraction reduction are achieved, in accordance with 3745-40-09 of the Ohio Administrative Code.

E. Each day when sewage sludge or biosolids are generated by the wastewater treatment plant for disposal or beneficial use, a representative sample of sewage sludge or biosolids shall be collected and analyzed for percent total solids. The daily values of percent total solids may be averaged for each calendar month. This monthly average of percent total solids may be used to calculate the total Sewage Sludge Weight (Discharge Monitoring Report code 70316) and/or total Sewage Sludge Fee Weight (Discharge Monitoring Report code 51129) generated by the treatment plant for each calendar month. The results of the daily monitoring, and the weight calculations, shall be maintained on site for a minimum of five years. The test methodology used shall be from Part 2540 G of Standard Methods for the Examination of Water and Wastewater American Public Health Association, American Water Works Association, and Water Environment Federation, using the edition which is current on the issuance date of the permit. To convert from gallons of liquid sewage sludge to dry tons of sewage sludge: dry tons = gallons x 8.34 (lb/gallon) x 0.0005 (tons/lb) x decimal fraction total solids.

F. A sampling plan shall be maintained by the permittee. The plan shall include, at a minimum, the following for all required sampling:

a. Sample collection or monitoring locations.
b. Sample or monitoring frequency.
c. Sample collection or monitoring procedures.
d. Sample storage and preservation procedures.
e. For composite samples of biosolids, a minimum of six grab samples collected at such times and locations, and in such fashion, as to be representative of the biosolids generated at the facility for beneficial use.

G. The storage and beneficial use of Class B biosolids shall not result in the generation of nuisance odors and shall not adversely affect human health or the environment. Should a nuisance odor be generated, as determined by Ohio EPA, the permittee shall implement all necessary corrective actions to eliminate the nuisance odor. Repeated nuisance odor complaints shall result in the prohibition of field storage. Should a determination be made by the Ohio EPA that the storage or beneficial use of Class B biosolids is a threat to human health or the environment, permission to use biosolids for land application may be revoked upon written notification from the Director.

H. The "Part III - GENERAL CONDITIONS" language in this NPDES permit appears in all Ohio NPDES permits. This NPDES permit for ALCOSAN is intended to regulate the beneficial use of Class B biosolids in Ohio. This permit does not establish requirements for the disposal, use, storage, or treatment of effluent. Since this permit is applicable to biosolids, not effluent, the Permittee is exempted from the conditions appearing in the following Paragraphs of PART III:
2. GENERAL EFFLUENT LIMITATIONS
11. UNAUTHORIZED DISCHARGES
32. AVAILABILITY OF PUBLIC SEWERS

I. No more than 20,000 dry tons of biosolids per year shall be beneficially used in Ohio under this permit. The first year shall begin on the effective date of this permit.

PART III - GENERAL CONDITIONS

1. DEFINITIONS

"Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

"Average weekly" discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. Each of the following 7-day periods is defined as a calendar week: Week 1 is Days 1 - 7 of the month; Week 2 is Days 8 - 14; Week 3 is Days 15 - 21; and Week 4 is Days 22 - 28. If the "daily discharge" on days 29, 30 or 31 exceeds the "average weekly" discharge limitation, Ohio EPA may elect to evaluate the last 7 days of the month as Week 4 instead of Days 22 - 28. Compliance with fecal coliform bacteria or *E. coli* bacteria limitations shall be determined using the geometric mean.

"Average monthly" discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. Compliance with fecal coliform bacteria or *E. coli* bacteria limitations shall be determined using the geometric mean.

"85 percent removal" means the arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.

"Absolute Limitations" Compliance with limitations having descriptions of "shall not be less than," "nor greater than," "shall not exceed," "minimum," or "maximum" shall be determined from any single value for effluent samples and/or measurements collected.

"Net concentration" shall mean the difference between the concentration of a given substance in a sample taken of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition, samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"Net Load" shall mean the difference between the load of a given substance as calculated from a sample taken of the discharge and the load of the same substance in a sample taken at the intake which supplies water to given process. For purposes of this definition, samples that are taken to determine the net loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.

"MGD" means million gallons per day.

"mg/l" means milligrams per liter.

"ug/l" means micrograms per liter.

"ng/l" means nanograms per liter.

"S.U." means standard pH unit.

"kg/day" means kilograms per day.

"Reporting Code" is a five digit number used by the Ohio EPA in processing reported data. The reporting code does not imply the type of analysis used nor the sampling techniques employed.

"Quarterly (1/Quarter) sampling frequency" means the sampling shall be done in the months of March, June, August, and December, unless specifically identified otherwise in the Effluent Limitations and Monitoring Requirements table.

"Yearly (1/Year) sampling frequency" means the sampling shall be done in the month of September, unless specifically identified otherwise in the effluent limitations and monitoring requirements table.

"Semi-annual (2/Year) sampling frequency" means the sampling shall be done during the months of June and December, unless specifically identified otherwise.

"Winter" shall be considered to be the period from November 1 through April 30.

"Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.

"Summer" shall be considered to be the period from May 1 through October 31.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

"Sewage sludge" means a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works as defined in section 6111.01 of the Revised Code. "Sewage sludge" includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes. "Sewage sludge" does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of domestic sewage in a treatment works, animal manure, residue generated during treatment of animal manure, or domestic septage.

"Biosolids" means sewage sludge or mixtures containing sewage sludge that have been treated for beneficial use.

"Sewage sludge weight" means the weight of sewage sludge, in dry U.S. tons, including admixtures such as liming materials or bulking agents. Monitoring frequencies for sewage sludge parameters are based on the reported sludge weight generated in a calendar year (use the most recent calendar year data when the NPDES permit is up for renewal).

"Sewage sludge fee weight" means the weight of sewage sludge, in dry U.S. tons, excluding admixtures

such as liming materials or bulking agents. Annual sewage sludge fees, as per section 3745.11(Y) of the Ohio Revised Code, are based on the reported sludge fee weight for the most recent calendar year.

2. GENERAL EFFLUENT LIMITATION

The effluent shall, at all times, be free of substances:

A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or waterfowl;

B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam, or sheen;

C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance;

D. In amounts that either singly or in combination with other substances are toxic to human, animal, or aquatic life;

E. In amounts that are conducive to the growth of aquatic weeds or algae to the extent that such growth become inimical to more desirable forms of aquatic life, or create conditions that are unsightly, or constitute a nuisance in any other fashion;

F. In amounts that will impair designated instream or downstream water uses.

3. FACILITY OPERATION AND QUALITY CONTROL

All wastewater treatment works shall be operated in a manner consistent with the following:

A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with conditions of the permit.

B. The permittee shall effectively monitor the operation and efficiency of treatment and control facilities and the quantity and quality of the treated discharge.

C. Maintenance of wastewater treatment works that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by Ohio EPA as specified in the Paragraph in the PART III entitled, "UNAUTHORIZED DISCHARGES".

4. REPORTING

A. Monitoring data required by this permit shall be submitted monthly on Ohio EPA 4500 Discharge Monitoring Report (DMR) forms using the electronic DMR (e-DMR) internet application. e-DMR allows permitted facilities to enter, sign, and submit DMRs on the internet. e-DMR information is found on the following web page:
https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/electronic-business-services

B. DMRs shall be signed by a facility's Responsible Official or a Delegated Responsible Official (i.e. a person delegated by the Responsible Official). The Responsible Official of a facility is defined as:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (b) The manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

3. In the case of a municipal, state, or other public facility, by either the principal executive officer, the ranking elected official or other duly authorized employee.

For e-DMR, the person signing and submitting the DMR will need to obtain an eBusiness Center account and Personal Identification Number (PIN). Additionally, Delegated Responsible Officials must be delegated by the Responsible Official on-line using the eBusiness Center's delegation function. For more information on the PIN and delegation processes, please view the following web page: https://epa.ohio.gov/help-center/ebusiness-center

C. DMRs submitted using e-DMR shall be submitted to Ohio EPA by the 20th day of the month following the month-of-interest.

D. If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in Section 5. SAMPLING AND ANALYTICAL METHODS, the results of such monitoring shall be included in the calculation and reporting of the values required in the reports specified above.

E. Analyses of pollutants not required by this permit, except as noted in the preceding paragraph, shall not be reported to the Ohio EPA, but records shall be retained as specified in Section 7. RECORDS RETENTION.

5. SAMPLING AND ANALYTICAL METHOD

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored flow. Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136, "Test Procedures for the Analysis of Pollutants" unless other test procedures have been specified in this permit. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

6. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

A. The exact place and date of sampling; (time of sampling not required on EPA 4500)

B. The person(s) who performed the sampling or measurements;

C. The date the analyses were performed on those samples;

D. The person(s) who performed the analyses;

E. The analytical techniques or methods used; and

F. The results of all analyses and measurements.

7. RECORDS RETENTION

The permittee shall retain all of the following records for the wastewater treatment works for a minimum of three years except those records that pertain to the treatment, storage, transfer, or disposal, and the beneficial use of biosolids, which shall be kept for a minimum of five years, including:

A. All sampling and analytical records (including internal sampling data not reported);

B. All original recordings for any continuous monitoring instrumentation;

C. All instrumentation, calibration and maintenance records;

D. All treatment works operation and maintenance records;

E. All reports required by this permit; and

F. Records of all data used to complete the application for this permit for a period of at least three years, or five years for sewage sludge or biosolids, from the date of the sample, measurement, report, or application.

These periods will be extended during the course of any unresolved litigation, or when requested by the Regional Administrator or the Ohio EPA. The three-year period, or five-year period for sewage sludge or biosolids, for retention of records shall start from the date of sample, measurement, report, or application.

8. AVAILABILITY OF REPORTS

Except for data determined by the Ohio EPA to be entitled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate district offices of the Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential.

9. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating the permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. RIGHT OF ENTRY

The permittee shall allow the Director or an authorized representative upon presentation of credentials and other documents as may be required by law to:

A. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.

C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit.

D. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. UNAUTHORIZED DISCHARGES

A. Bypass Not Exceeding Limitations - The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 11.B and 11.C.

B. Notice

1. Anticipated Bypass - If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.

2. Unanticipated Bypass - The permittee shall submit notice of an unanticipated bypass as required in paragraph 12.B (24-hour notice).

C. Prohibition of Bypass

1. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. The permittee submitted notices as required under paragraph 11.B.

2. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 11.C.1.

12. NONCOMPLIANCE NOTIFICATION

A. Exceedance of a Daily Maximum Discharge Limit

1. The permittee shall report noncompliance that is the result of any violation of a daily maximum discharge limit for any of the pollutants listed by the Director in the permit by e-mail or telephone within twenty-four (24) hours of discovery. The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.ohio.gov
Southwest District Office: swdo24hournpdes@epa.ohio.gov
Northwest District Office: nwdo24hournpdes@epa.ohio.gov
Northeast District Office: nedo24hournpdes@epa.ohio.gov
Central District Office: cdo24hournpdes@epa.ohio.gov
Central Office: co24hournpdes@epa.ohio.gov

The permittee shall attach a noncompliance report to the email. A noncompliance report form is available on the following website under the Monitoring and Reporting - Non-Compliance Notification section: https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/individual-wastewater-discharge-permits

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330
Southwest District Office: (800) 686-8930
Northwest District Office: (800) 686-6930
Northeast District Office: (800) 686-6330
Central District Office: (800) 686-2330
Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

a. The name of the permittee, and a contact name and telephone number;
b. The limit(s) that has been exceeded;
c. The extent of the exceedance(s);
d. The cause of the exceedance(s);
e. The period of the exceedance(s) including exact dates and times;
f. If uncorrected, the anticipated time the exceedance(s) is expected to continue; and,
g. Steps taken to reduce, eliminate or prevent occurrence of the exceedance(s).

B. Other Permit Violations

1. The permittee shall report noncompliance that is the result of any unanticipated bypass resulting in an exceedance of any effluent limit in the permit or any upset resulting in an exceedance of any effluent limit in the permit by e-mail or telephone within twenty-four (24) hours of discovery. The permittee may report to the appropriate Ohio EPA district office e-mail account as follows (this method is preferred):

Southeast District Office: sedo24hournpdes@epa.ohio.gov
Southwest District Office: swdo24hournpdes@epa.ohio.gov
Northwest District Office: nwdo24hournpdes@epa.ohio.gov
Northeast District Office: nedo24hournpdes@epa.ohio.gov
Central District Office: cdo24hournpdes@epa.ohio.gov
Central Office: co24hournpdes@epa.ohio.gov

The permittee shall attach a noncompliance report to the e-mail. A noncompliance report form is available on the following web site under the Monitoring and Reporting - Non-Compliance Notification section: https://epa.ohio.gov/divisions-and-offices/surface-water/permitting/individual-wastewater-discharge-permits

Or, the permittee may report to the appropriate Ohio EPA district office by telephone toll-free between 8:00 AM and 5:00 PM as follows:

Southeast District Office: (800) 686-7330
Southwest District Office: (800) 686-8930
Northwest District Office: (800) 686-6930
Northeast District Office: (800) 686-6330
Central District Office: (800) 686-2330
Central Office: (614) 644-2001

The permittee shall include the following information in the telephone noncompliance report:

a. The name of the permittee, and a contact name and telephone number;
b. The time(s) at which the discharge occurred, and was discovered;
c. The approximate amount and the characteristics of the discharge;
d. The stream(s) affected by the discharge;
e. The circumstances which created the discharge;
f. The name and telephone number of the person(s) who have knowledge of these circumstances;
g. What remedial steps are being taken; and,
h. The name and telephone number of the person(s) responsible for such remedial steps.

2. The permittee shall report noncompliance that is the result of any spill or discharge which may endanger human health or the environment within thirty (30) minutes of discovery by calling the 24-Hour Emergency Hotline toll-free at (800) 282-9378. The permittee shall also report the spill or discharge by e-mail or telephone within twenty-four (24) hours of discovery in accordance with B.1 above.

C. When the telephone option is used for the noncompliance reports required by A and B, the permittee shall submit to the appropriate Ohio EPA district office a confirmation letter and a completed noncompliance report within five (5) days of the discovery of the noncompliance. This follow up report is not necessary for the e-mail option which already includes a completed noncompliance report.

D. If the permittee is unable to meet any date for achieving an event, as specified in a schedule of compliance in their permit, the permittee shall submit a written report to the appropriate Ohio EPA district office within fourteen (14) days of becoming aware of such a situation. The report shall include the following:

1. The compliance event which has been or will be violated;
2. The cause of the violation;
3. The remedial action being taken;
4. The probable date by which compliance will occur; and
5. The probability of complying with subsequent and final events as scheduled.

E. The permittee shall report all other instances of permit noncompliance not reported under paragraphs A or B of this section on their monthly DMR submission. The DMR shall contain comments that include the information listed in paragraphs A or B as appropriate.

F. If the permittee becomes aware that it failed to submit an application, or submitted incorrect information in an application or in any report to the director, it shall promptly submit such facts or information.

13. RESERVED

14. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

15. AUTHORIZED DISCHARGES

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than, or at a level in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such violations may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

16. DISCHARGE CHANGES

The following changes must be reported to the appropriate Ohio EPA district office as soon as practicable:

A. For all treatment works, any significant change in character of the discharge which the permittee knows or has reason to believe has occurred or will occur which would constitute cause for modification or revocation and reissuance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Notification of permit changes or anticipated noncompliance does not stay any permit condition.

B. For publicly owned treatment works:

1. Any proposed plant modification, addition, and/or expansion that will change the capacity or efficiency of the plant;

2. The addition of any new significant industrial discharge; and

3. Changes in the quantity or quality of the wastes from existing tributary industrial discharges which will result in significant new or increased discharges of pollutants.

C. For non-publicly owned treatment works, any proposed facility expansions, production increases, or process modifications, which will result in new, different, or increased discharges of pollutants.

Following this notice, modifications to the permit may be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. A determination will also be made as to whether a National Environmental Policy Act (NEPA) review will be required. Sections 6111.44 and 6111.45, Ohio Revised Code, require that plans for treatment works or improvements to such works be approved by the Director of the Ohio EPA prior to initiation of construction.

D. In addition to the reporting requirements under 40 CFR 122.41(l) and per 40 CFR 122.42(a), all

existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

1. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis of any toxic pollutant which is not limited in the permit. If that discharge will exceed the highest of the "notification levels" specified in 40 CFR Sections 122.42(a)(1)(i) through 122.42(a)(1)(iv).

2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" specified in 122.42(a)(2)(i) through 122.42(a)(2)(iv).

17. TOXIC POLLUTANTS

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. Following establishment of such standards or prohibitions, the Director shall modify this permit and so notify the permittee.

18. PERMIT MODIFICATION OR REVOCATION

A. After notice and opportunity for a hearing, this permit may be modified or revoked, by the Ohio EPA, in whole or in part during its term for cause including, but not limited to, the following:

1. Violation of any terms or conditions of this permit;

2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

3. Change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

B. Pursuant to rule 3745-33-04, Ohio Administrative Code, the permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The filing of a request by the permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the appropriate Ohio EPA district office at least ninety days before the date on which it is desired that the modification become effective. The application shall be made only on forms approved by the Ohio EPA.

19. TRANSFER OF OWNERSHIP OR CONTROL

This permit may be transferred or assigned, and a new owner or successor can be authorized to discharge from this facility, provided the following requirements are met:

A. The permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty (60) days prior to the proposed date of transfer;

B. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) shall be

submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the permittee to the succeeding owner;

At any time during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if he concludes that such transfer will jeopardize compliance with the terms and conditions of the permit. If the Director does not prevent transfer, he will modify the permit to reflect the new owner.

20. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

21. SOLIDS DISPOSAL

Collected grit and screenings, and other solids other than sewage sludge or biosolids, shall be disposed of in such a manner as to prevent entry of those wastes into waters of the state, and in accordance with all applicable laws and rules.

22. CONSTRUCTION AFFECTING NAVIGABLE WATERS

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

23. CIVIL AND CRIMINAL LIABILITY

Except as exempted in the permit conditions on UNAUTHORIZED DISCHARGES or UPSETS, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

24. STATE LAWS AND REGULATIONS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

25. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

26. UPSET

The provisions of 40 CFR Section 122.41(n), relating to "Upset," are specifically incorporated herein by reference in their entirety. For definition of "upset," see Part III, Paragraph 1, DEFINITIONS.

27. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any

provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

28. SIGNATORY REQUIREMENTS

All applications submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR 122.22.

All reports submitted to the Director shall be signed and certified in accordance with the requirements of 40 CFR Section 122.22.

29. OTHER INFORMATION

A. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

B. ORC 6111.99 provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

C. ORC 6111.99 states that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $25,000 per violation.

D. ORC 6111.99 provides that any person who violates Sections 6111.04, 6111.042, 6111.05, or division (A) of Section 6111.07 of the Revised Code shall be fined not more than $25,000 or imprisoned not more than one year, or both.

30. NEED TO HALT OR REDUCE ACTIVITY

40 CFR 122.41(c) states that it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with conditions of this permit.

31. APPLICABLE FEDERAL RULES

All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

32. AVAILABILITY OF PUBLIC SEWERS

Notwithstanding the issuance or non-issuance of an NPDES permit to a semi-public disposal system, whenever the sewage system of a publicly owned treatment works becomes available and accessible, the permittee operating any semi-public disposal system shall abandon the semi-public disposal system and connect it into the publicly owned treatment works.

APPENDIX E TO SCOPE OF SERVICES

LIST OF LANDFILLS WITH COMPLETED WASTE CHARACTERIZATIONS

[See Attached]

Hauling Information

	Landfill (State), Permit #	Hauling Hours	SLUDGE Limits (subject to change)	Waste Material Permitted & Approval Codes	Address
Republic Landfills	Imperial (PA) #100620A	Operating Hours M-F 2:00 am- 3:00 pm Sat. Closed **SLUDGE HOURS** **M-F: 2:30 am to 6:00 am** **8:30 am to 1:30 pm** **(6:00-8:30 ban during school year)**	**15,000 tons/year (6-8 loads per day split between ALCOSAN & contractor).**	Sludge:5083Y36090	11 Boggs Road P.O. Box 47 Imperial, PA 15126
Republic Landfills	Carbon (OH) OHD987048212/28726		**Emergency only-2,500/yr about 2/day**	Sludge (Limed): 5076Y36490	8100 S. Stateline Rd Lowellville, OH 44436
Republic Landfills	Carbon (OH) OHD987048212/28726		**20,000 tons/year**	Dewatered Sewage Sludge: 5076124641	
Republic Landfills	Short Creek (WV) #1034		**20,000 tons/yr (2-4 loads/day)**	Sludge (Limed): 43831417174	258 North Fork Shorthcreek, WV 26003
Republic Landfills	Short Creek (WV) #1034		**8,000 tons/yr**	Dewatered Sewage Sludge: 43831619891	
Republic Landfills	Greenridge (PA) #100281	M-F: 6 am - 1 pm	**10,000 tons/yr**	Limed sludge: 41482122373	Landfill Rd. Scottdale, PA 15683
Waste Management Landfills (PA)	South Hills #100592	M-F 7:00 AM - 2 PM No Sat. Hours	**Call ahead**	Sludge: 5939	3100 Hill Road Library, PA 15129
Waste Management Landfills (PA)	Arden #100172	Operating Hours[1] M-F 5:00 AM - 4:30 PM Sat. 6:00 AM - noon **SLUDGE arrive ~60 mins before close**	**M-F: 500 tons/month at 125 tons/week** **Sat: 6+ loads between ALCOSAN & Contractor. Call Ahead.**	Sludge: 30	P.O. Box BC Arden Station Rd. Washington, PA 15301
Waste Management Landfills (PA)	Monroeville #100594	Operating Hours[1] M-F 4:30 AM - 3 PM Sat. 4:30 AM - Noon **SLUDGE HOURS[1]** **M-F: 5:00 am - 2 pm** **Sat: 5:00 am - 11:00 am** **Sat. CALL AHEAD**	**M-F: 600 tons/day** (only if meet shear strength) **Sat: About 4 loads between ALCOSAN & Contractor. Call Ahead.**	Sludge: 1	600 Thomas Street Monroeville, PA 15146
Waste Management Landfills (PA)	Valley #100280	M-F 5:30 AM - 2 PM No Sat. Hours	**Call ahead**	Sludge/Ash: 6336	RD #2 Box 282A Pleasant Valley Road Irwin, Pa 15642
Wetzel (WV) #1013		M-F 6:00 AM-4:00 PM Sat: 6:00 AM-1:30 PM **(arrive 30 mins before close)**	**6,000 tons/year** **Call ahead 1-2 days prior**	Sludge: 6655-043-221004-PA-02	1521 Wetzel County Landfill Road New Martinsville, WV 26155
Westmoreland (PA) #100277		M-F 6 AM - 2:30 PM No Sat Hours	**10,000 tons/year**	Sludge: 2203	111 Conner Lane Belle Vernon, PA 15012

APPENDIX F TO SCOPE OF SERVICES

ALCOSAN LAB OUTLINE

[See Attached]

SAMPLE TYPE	FREQUENCY	PARAMETERS			SAMPLED BY
Aqueous					
PRIMARY INFLUENT (ACSA LOC #1)					
GRAB	DAILY	pH	Temperature		Laboratory
24 HOUR COMPOSITE	DAILY	TBOD	Total Suspended Solids		Operations/ Laboratory
	1/week Wednesday	Alkalinity Total Solids	TKN Volatile Suspended Solids	Ammonia Phosphorus (Sulfuric pres)	
	2/week Tues./Thurs.	TDS			
PRIORITY POLLUTANT GRAB	Quarterly	pH Oil & Grease Cyanide, Total Phenolics, Total	PCBs 624 Volatile Organics Heptachlor/Hept Epoxide (3cont) 2,3,7,8-TCDD (1 amber jar)	Acrolein (under 624) Acrylonitrile (under 624)	INDUSTRIAL WASTE
PRIORITY POLLUTANT COMPOSITE	Quarterly	Mercury Silver Arsenic Cadmium Chromium Copper	Nickel Molybdenum Zinc Antimony Beryllium Selenium	Thallium Lead Pesticides (w/ Toxaphene) 625 BNA	INDUSTRIAL WASTE
Grab	Annual	Asbestos			Industrial Waste
FINAL EFFLUENT (ACSA LOC #3)					
Grab	Daily	Fecal Coliform			Laboratory
	Once per shift	pH	Chlorine Residual - Total	Dissolved Oxygen	
24 HOUR COMPOSITE	DAILY	Total Suspended Solids	CBOD	NH3-N	Operations/ Laboratory
	1/week Wednesday	Alkalinity Nitrate Nitrite	TKN **H2SO4 Preserved** Nitrate-Nitrite Combined	**H2SO4 Preserved** **Phosphorous**	
	2/week Tues./Thurs.	TDS	Chloride Bromide	Sulfate 1,4-Dioxane	
PRIORITY POLLUTANT GRAB	Quarterly	pH Oil & Grease Cyanide, Total Phenolics, Total	PCBs 624 Volatile Organics Heptachlor/Hept Epoxide (3cont) 2,3,7,8-TCDD (1 amber jar)	Acrolein (under 624) Acrylonitrile (under 624)	INDUSTRIAL WASTE
PRIORITY POLLUTANT COMPOSITE	Quarterly	Silver Arsenic Cadmium Chromium Copper Mercury	Nickel Molybdenum Zinc Antimony Beryllium Selenium	Thallium Lead Pesticides (w/ Toxaphene) 625 BNA	INDUSTRIAL WASTE
Grab	Annual	Asbestos			Industrial Waste

Red indicates analyses performed by a contract laboratory

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
PRIMARY EFFLUENT EAST & WEST (ACSA LOC #2)			
24 HOUR COMPOSITE	1/week Tuesday	Settleable Solids	Operations/ Laboratory
	2/week Tues./Thurs.	TBOD CBOD Total Suspended Solids	
Solids			
LIMED SLUDGE			
MIXER COMP	Hourly[1, 2]	Total Solids (SM2540G)	Operations[3]/ Laboratory
MIXER GRAB	Daily[1]	Initial pH 2 Hour Delay pH 24 Hour Delay pH	Laboratory/ Operations[4]
Small sample from each Daily Mixer Composite during the first 3 production days of the month COMPOSITE	Monthly	Total Solids (SM2540G) TKN NH_3-N Nitrate Nitrite Total Phosphorus Nitrate -Nitrite Nitrogen Arsenic Cadmium Chromium Copper Mercury Potassium Molybdenum Nickel Lead Selenium Zinc **Calcium** Aluminum Iron	Laboratory
Grab Collect Grabs on First Day	Monthly	Total Solids (SM2540G) PCBs	Laboratory (Micro)
Grab	Annual	Asbestos	Industrial Waste
Grab (1 pint)	Annual	Radiation: Gamma Spectroscopy - Quantitative (request I-131 conc. on COC.)	Laboratory (Micro)
UNLIMED SLUDGE			
24 HR COMP	once per shift	Total Solids (SM2540G) Total Volatile Solids (SM2540G)	Operations[3] / Laboratory
Dewatering Bldg. Sample ---------- COMPOSITE a sample from each 24hr composite during **first 5 days of the month**	Monthly	Total Solids (SM2540G) Total Volatile Solids (SM2540G) Arsenic Beryllium Cadmium Chromium Mercury Nickel Lead	Operations[3]/ Laboratory

Red indicates analyses performed by a contract laboratory

1. During production.
2. Minimum 3 per day.
3. Sampled by Operations then composited by Laboratory.
4. Sampled by Laboratory unless "after hours start-up" then sampled by Operations.

Log Solid Grab samples as separate LIMS ID than Composite sample.

All solid composite samples, add this comment during login: "Sample composited on month/day from grabs collected on month/day, month/day, etc."

Solid matrix composite samples need composited the day the last sample is collected. Exceptions: if that falls on an afternoon, weekend, or holiday. Then the last sample will still be collected, but all samples will be composited on the next regular week day

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
FEED SLUDGE			
24 HR COMP	Daily	Total Solids	Operations
FILTRATE			
24 HR COMP	Daily	Total Solids	Operations
ASH			
Grab	Daily	Total Solids	Operations
POLYMER TRUCK SAMPLES			
Grab	As Needed	Total Solids	Operations
HYPOCHLORITE TRUCK SAMPLES			
Grab	As Needed	% Hypochlorite pH Temperature	Operations
LIME TRUCK SAMPLES			
Grab	As Needed	Slaking Test (when pH fails) Calcium Oxide Content (if sample fails Slaking Test)	Truck Driver picked up by Lab
SEPTAGE HAULERS			
Grab	per truck delivery	Total Solids	Truck Driver picked up by Lab
ACTIVATED SLUDGE			
Grab	1/week Wednesday	**Total Suspended Solids** **Volatile Suspended Solids** **<u>*Sample must be mixed!</u>**	Laboratory
		pH Temperature	
MICRO DI WATER (From House DI Tap and Smart2Pure System)			
GRAB	Daily	pH Chlorine Residual Temperature	Laboratory
	Monthly (Collect samples first week each month)	Ammonia TOC HPC	
	Annual (Collect sample first week of January each year)	Lead Copper Cadmium Nickel Chromium Zinc	

Red indicates analyses performed by a contract laboratory

SAMPLE TYPE	FREQUENCY	PARAMETERS	SAMPLED BY
ASH, SCUM & LIMED SLUDGE- QUARTERLY			
GRIT- SEMI ANNUALLY (typically Q1 and Q3)			
UNLIMED SLUDGE- ANNUALLY (all matricies sent to outside lab, typically Q3)			
7 days of a Grab sample to generate a Composite* -------- (minimum 7 days, collect one sample container each day. See Note for Grit) Each sample matrix is analyzed for all parameters listed. ---------- NOTE: 3 Quarters of each year these analyses are performed by Alcosan Lab, for the parameters accredited for (unaccredited parameters are sent out) 1 Quarter of each year, when unlimed sludge is included, analyses are performed by contract laboratory(s) only- **See Residuals for which quarter.**	Quarterly	ASTM EXTRACTION (LIQUID)[7] pH(SW-846 9040C) pH Temp(SW-846 9040C) Total Solids Total Volatile Solids Nitrate-Nitrogen Cyanide, Total Oil & Grease**[5] COD NH3-N Total Sulfates TCLP EXTRACTION (LIQUID) TCLP METALS: Aluminum Arsenic Barium Cadmium Chromium Lead Mercury Selenium Antimony Boron Copper Molybdenum Nickel Zinc Silver Herbicides Pesticides Chlordane Toxaphene 8270 BNA 8260 Volatile Organics (ZHE) MISCELLANEOUS (SOLID) pH pH temperature Solids, Total (SM2540G)*,[5] Solids, Total (SM2540G) Volatile Solids (SM2540G)# Phenolics *,[5] Cyanide, Total Total Sulfide 2,3,7,8-TCDD *,[5] PCBs *[5] Oil & Grease **,[5] Solids, Total (SM2540G)**,[5] Solids, Total (SM2540G)[6] Arsenic [6] Barium [6] Cadmium [6] Chromium [6] Lead [6] Mercury [6] Selenium [6] Silver [6] Antimony [6] Beryllium [6] Molybdenum [6] Nickel [6] Zinc [6] Boron [6] Copper [6] Sodium [6] Thallium [6] Total Sulfur[6] Paint Filter Test Ignitability 8270 BNA Herbicides Pesticides Heptachlor/Hep. Epoxide Chlordane Toxaphene Reactive Cyanide Reactive Sulfide 8260 Volatile Organics *,[5] ** HEM and total solids collected in a separate clear pint jar as a grab # Not logged in separately from Solids, Total * Analyses done on a separate grab sample for each matrix.	Laboratory

Red indicates analyses performed by a contract laboratory

priority pollutant

5. Grab samples collected on the first day of sampling.
6. Log metals sample, and metals TS sample, with separate LIMS ID number and add "report due by "XDATEX" on COC
7. Log in as test group "ASTM Extraction (liquid)"

All solid composite samples, add this comment during login: "Sample composited on month/day from grabs collected on month/day, month/day, etc."

Solid matrix composite samples need composited the day the last sample is collected. Exceptions: if that falls on an afternoon, weekend, or holiday. Then the last sample will still be collected, but all samples will be composited on the next regular week day

GRIT matrix for **COMPOSITE** will be collected only on days when both East and West grit is available. Fill one pint jar from each location each day. Grit must be collected from the truck- contact operations to move truck for access to west grit. All samples will be compositied on final collection day.

NEW: GRIT matrix for GRAB will be collected only from one location- EAST or WEST and will alternate each event. Please note in Site column which location was collected. Grit must be collected from the truck- contact operations to move truck for access to west grit.

ARTICLE IV

SERVICE AGREEMENT

THIS SERVICE AGREEMENT (this "Agreement") is made and entered into this _____ day of _____, 2026 by and between the Allegheny County Sanitary Authority, having its address at 3300 Preble Avenue, Pittsburgh, Pennsylvania 15233 (hereinafter referred to as the "Authority"), and _____, having an office at _____ (hereinafter referred to as the "Provider").

WITNESSETH:

WHEREAS, the Authority is a body politic and corporate, created pursuant to the Municipality Authorities Act of 1945;

WHEREAS, the Authority's operations include the removal of treated sewage sludge ("Biosolids") and unlimed sewage sludge ("Unlimed Solids") from the wastewater treated at the Authority's wastewater treatment plant in Pittsburgh, Allegheny County, Pennsylvania (the "Plant");

WHEREAS, the Authority did by advertisement heretofore made, request Proposals for services, to be performed in accordance with the Proposal Documents (the "Proposal Documents"), this Agreement, the Scope of Services set forth in Article III of the Proposal Documents, and any Addenda thereto, which are incorporated by reference herein and made a part hereof (the "Services");

WHEREAS, the Services include, but are not limited to, management and disposal of Biosolids and Unlimed Solids from the Plant;

WHEREAS, in accordance with said advertisement and the Proposal Documents, the Provider submitted a Proposal for the Services to be furnished under this Agreement for the prices that were set forth in the Proposal, as such prices are further set forth on Exhibit A attached to this Agreement and incorporated herein by this reference.

WHEREAS, the Authority desires to engage the Provider to perform the Services set forth above in accordance with this Agreement; and

WHEREAS, the Provider desires to perform the Services needed by the Authority and shall provide such Services in accordance with this Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual benefits that will accrue to the parties hereto in carrying out the terms of this Agreement and intending to be legally bound hereby, it is mutually understood and agreed as follows:

I. SCOPE OF SERVICES AND GENERAL DUTIES OF PROVIDER

A. The Scope of Services to be provided is as set forth by this Agreement and Article III of the Proposal Documents, which are hereby fully incorporated by reference herein.

1. The Provider shall be responsible for the professional quality, technical skill, and timely completion of all Services furnished by the Provider under this Agreement in compliance with Applicable Laws and Regulations and applicable Permits.

2. The Authority will cooperate with the Provider in the performance by the Provider of the Services hereunder, including, without limitation, providing the Provider with timely access to data, information, facilities, and personnel of the Authority. The Authority will be responsible for the performance of its employees and agents.

3. The relationship of the Provider to the Authority will be that of an independent service provider. No employer/employee relationships shall be deemed to be established, and the Provider, its agents, subcontractors, and employees, shall be independent service providers at all times. Neither party will act or represent itself, directly or by implication, as an agent of the other or in any manner assume or create an obligation on behalf of, or in the name of, the other.

4. a. The Provider designates _____ as its Agreement Manager. The Agreement Manager is authorized to act on behalf of the Provider with respect to performance of Services for the Authority in accordance with this Agreement. If the Provider changes its Agreement Manager, the Provider shall designate a new representative suitable to the Authority.

   b. A representative of the Provider shall attend all meetings that are necessary to facilitate this Agreement. In addition, the Provider shall attend all meetings of the Authority Board where the Provider is informed that the Services are on the meeting agenda to be discussed and the Provider's attendance is necessary.

5. _____, the Authority's _____, shall act as the Authority's representative with respect to the Services to be performed under this Agreement. _____, the Authority's _____, shall act as the Authority's representative to the extent authorized by the Authority's Policies and Procedures to exercise the rights and responsibilities of the Authority provided in this Agreement.

II. PERIOD OF AGREEMENT

A. Subject to Article VIII of this Agreement pertaining to Termination, the term of this Agreement shall be three (3) years.

B. Upon the Authority's initiative, this Agreement may be renewed for additional one (1) year periods, or may be extended for additional periods of less than one (1) year, upon the mutual agreement of the parties. In the event the Authority wishes to

renew or extend this Agreement, it shall provide written notice to the Provider no later than two (2) months prior to the expiration of the last applicable period of this Agreement.

C. The Provider shall be entitled to propose for consideration by the Authority a modification(s) in the compensation payable in accordance with Article III of this Agreement as an inducement to the Authority to renew or extend the applicable period of this Agreement pursuant to the provisions of this Article II. The Provider shall provide written notice of the proposed modification(s) no later than four (4) months prior to the expiration of the last applicable period of this Agreement.

III. COMPENSATION

A. The Authority will pay the Provider for the Services the amounts specified on Exhibit A hereto (the "Contract Pricing").

B. The Authority will adjust the Contract Pricing during the term of this Agreement as follows:

1. Prices shall be adjusted on each anniversary date of this Agreement by the percentage increase, if any, in the Consumer Price Index for All Urban Consumers (CPI-U), Pittsburgh metropolitan area, All Items, Base Period 1982-84=100, as published by the U.S. Bureau of Labor Statistics (or any successor index thereto); provided, however, that in no event shall any such annual adjustment exceed five percent (5%) per year. The Authority shall provide written notice to the Provider of the adjusted amount thirty (30) days prior to the anniversary date.

C. The Provider has submitted the aggregate Beneficial Use Target (the "Beneficial Use Target") for the term of this Agreement as specified on Exhibit A hereto. The Provider shall pay the Authority a penalty in the amount of Fifteen Dollars ($15.00) per ton for every ton of Biosolids and Unlimed Solids below the Beneficial Use Target that is not beneficially used or sent for processing for Beneficial Use during the term of this Agreement provided that such penalty shall not exceed Two Hundred Thousand Dollars ($200.000.00). Any penalty due under this Agreement shall be calculated and paid, if applicable, in accordance with the Reconciliation described in Article IV, Section C, of this Agreement.

D. No daily, weekly, or monthly quantities are guaranteed, but should the Authority fail to provide the Provider with an average of 2,500 wet tons per month (prorated for partial months) of Biosolids and Unlimed Solids over the term of this Agreement (other than due to events of Force Majeure pursuant to this Agreement), the Authority shall pay the Provider the sum of Thirty-Five Dollars ($35.00) per wet ton of shortfall to assist the Provider in covering its fixed costs. Any shortfall payment due under this Agreement shall be calculated and paid, if applicable, in

accordance with the Reconciliation described in Article IV, Section C, of this Agreement.

IV. PAYMENT

A. The Provider will invoice the Authority at the end of each month in which Services are provided in accordance with this Agreement. Each invoice will state: Biosolids Management Services and describe the applicable Service. Such invoices will be payable by the Authority promptly following the Authority Board Meeting approving the invoice, but in no event more than sixty (60) days from the date of the invoice unless daily and /or monthly reports or other service responsibilities have not been performed or complaints/violations have been received but not addressed, and except as otherwise provided in Article IV, Section C, hereof. The Authority's obligations that have accrued prior to the effective date of any termination or expiration of this Agreement will continue in full force and effect notwithstanding the termination or expiration of this Agreement and whether or not an invoice has been rendered with respect thereto.

B. The Authority's payment for any of the Services shall not be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement.

C. Any shortfall payment due from the Authority to the Provider under Article III, Section D, of this Agreement, and any penalty payment due from the Provider to the Authority under Article III, Section C, of this Agreement, shall be calculated and specified by the Authority to the Provider within sixty (60) days after the expiration of this Agreement (the "Reconciliation"), and any amounts due shall be paid by the Provider and/or by the Authority, as the case may be, within thirty (30) days after such calculation and specification by the Authority. The Authority reserves the right to withhold the final payment due to the Provider under this Agreement and to set off against such final payment any amounts due from the Provider to the Authority as determined pursuant to the Reconciliation.

V. REPRESENTATIONS, WARRANTIES AND COVENANTS OF PROVIDER

The Provider represents, warrants, and covenants to and with the Authority as follows:

A. Corporate Status. The Provider is a _____ corporation, validly existing and in good standing under the laws of the State (or Commonwealth) of _____, and is qualified to do business in the Commonwealth of Pennsylvania.

B. Power and Authorization. The Provider has the power and authority to execute, deliver, perform, and take all actions contemplated by this Agreement, and all such action has been duly and validly authorized by all necessary proceedings on its part.

C. Execution and Binding Effect. This Agreement has been duly and validly executed and delivered by the Provider. This Agreement constitutes the legal, valid, and binding obligation of the Provider, enforceable against the Provider in accordance with its terms. It is acknowledged that the Provider has had an opportunity to consult with legal counsel concerning the terms and conditions of this Agreement.

D. Familiarity with Applicable Laws and Services. Prior to the execution and delivery of this Agreement, the Provider has reviewed and is familiar with all Applicable Laws and Regulations and all applicable Permits (as defined in the Proposal Documents) governing or relating in any way to the performance and provision of the Services. The Provider has had an opportunity to meet with representatives of the Authority and to ask questions and discuss the Scope of Services to be furnished under this Agreement. All such questions have been answered to the satisfaction of the Provider.

E. Compliance with Laws. The Provider has the requisite organization, personnel, capital, plant, equipment, ability, training, certification, licenses, authorizations, permits, and experience to satisfactorily execute and carry out this Agreement in accordance with its provisions. In performing the Services under this Agreement, the Provider shall comply with, and its performance shall be in accord with, all Applicable Laws and Regulations and all applicable Permits, including, without limitation, Applicable Laws and Regulations of the U.S. Environmental Protection Agency, the Occupational Safety and Health Administration, the Pennsylvania Department of Environmental Protection, and the Ohio Environmental Protection Agency (each individually, a Governmental Authority, and collectively, "Governmental Authorities"). The Provider is in material compliance with Applicable Laws and Regulations and all applicable Permits, and the Provider is not subject to any pending or, to the Provider's knowledge, threatened suits, demands, actions, orders and/or investigations by any Governmental Authority for violations of Applicable Laws and Regulations or applicable Permits, including clean-up or cost recovery claims under federal or state environmental laws, including CERCLA and any similar state laws. The Provider shall also comply with any provisions, representations or agreements, or contractual clauses required thereby, to be included or incorporated by reference or operation of law in this Agreement and dealing with Equal Employment Opportunity, Employment of Veterans, Employment of the Handicapped, Employment Discrimination Because of Age, Utilization of Disadvantaged Business Enterprises, and the related Acts and Executive Orders that are now in existence or as they may hereafter be amended, supplemented, enacted, issued, modified or codified. From time to time, at the Authority's request, the Provider shall provide certificates to the Authority relating to compliance with any applicable legal requirements, in each case, in form and substance satisfactory to the Authority.

F. Compliance with Health and Safety Laws; Provider's Employees. The Provider will develop and maintain a valid Health and Safety Plan, and will comply with the plan and all applicable requirements under the federal Occupational Safety and Health Act and similar state laws with regard to the Services provided. While on the Plant

property, the Provider and its employees shall comply with all applicable health and safety laws, regulations, and ordinances and with the health and safety requirements and Plant rules of the Authority, as may be in effect from time to time. Upon request of the Authority and at no cost or expense to the Authority, the Provider shall promptly remove from the Plant property any person under the control of the Provider (including truck drivers and subcontractors) who violates any of the aforesaid laws, regulations, ordinances, requirements, rules, or policies, or who may cause or threaten to cause a breach of the peace, or who is otherwise objectionable to the Authority.

G. Precautions Against Personal Injury and Property Damage. The Provider shall take all necessary precautions to prevent the occurrence of any injury to persons or damage to property during the provision of the Services and, except to the extent that any such injury or damage is due solely and directly to the Authority's willful misconduct, shall defend and indemnify the Authority against any claim which may result in any way from any act or omission of the Provider, its agents, employees or subcontractors, in accordance with Article IX of this Agreement.

H. Additional Plans. The Provider will develop, maintain, update, and comply with the following plans and any other plans required by Applicable Laws and Regulations and the applicable Permits (as described further in the Proposal Documents):

1. Project Procedures Manual;
2. Beneficial Use Work Plan for each option set forth on Exhibit A hereto;
3. Spill Prevention and Control Plan;
4. Odor Control Plan;
5. Public Outreach Strategy;
6. Health and Safety Plan;
7. Personnel Information; and
8. Disposal Plan.

The Provider will provide the Authority with the opportunity to review these plans.

I. Payment of Taxes. The Provider shall pay all federal, state. and local taxes payable on or with respect to the Services provided hereunder and the materials used or disposed of therein. If the Provider fails to pay any such taxes, the Authority may, at its sole option, pay such taxes and deduct the amount thereof from any payment to be made to the Provider hereunder.

VI. INSURANCE

A. Without limiting any of the other obligations or liabilities of the Provider, the Provider shall, at its own expense, provide and maintain in force, until all of its Services to be performed under this Agreement have been completed (or for such duration as is otherwise specified hereinafter), the following insurance coverages:

1. Workers' Compensation Insurance to apply to all of the Provider's employees in compliance with, and in the limits prescribed by, the

"Workers' Compensation Law" of the Commonwealth of Pennsylvania and all applicable federal laws.

2. Commercial General Liability with a limit of not less than Two Million Dollars ($2,000,000) per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability, plus excess umbrella protection up to Five Million Dollars ($5,000,000) for the same. Such coverage shall include:

   a. Premises and/or Operations;

   b. Independent Contractors;

   c. Products and Completed Operations;

   d. Broad Form Property Damage; and

   e. Contractual Coverage Applicable to this specific Agreement.

3. Business Automobile Liability with a limit of not less than One Million Dollars ($1,000,000) per occurrence combined single limit for Bodily Injury Liability and Property Damage Liability plus excess liability umbrella protection as described above in subparagraph 2. Such coverage shall include:

   a. Owned Vehicles;

   b. Hired and Non-Owned Vehicles;

   c. Employers' Non-Ownership; and

   d. Pollution Liability - Broadened Coverage for Covered Auto Auto's Endorsement (ISO form CA 99 48).

4. Pollution Legal Liability with a limit of not less than Two Million Dollars ($2,000,000) per loss and an annual aggregate of Five Million Dollars ($5,000,000). Such coverage shall include:

   a. Bodily Injury;

   b. Property Damage, including loss of use of damaged property or of property that has not been physically injured or destroyed;

   c. Cleanup Costs; and

   d. Defense, including costs and expenses incurred in the investigation, defense, or settlement of claims.

5. The Provider shall provide to the Authority Certificates of Insurance evidencing to the satisfaction of the Authority, the insurance coverage specified in the foregoing subparagraphs 1, 2, 3 and 4. Such certificates shall provide that should such insurance be canceled, the issuing company shall provide thirty (30) days prior written notice to the Authority. The Authority shall be named as an additional insured on a primary and non-contributory basis as to the Provider liability on policies referenced in subparagraphs 1, 2, 3, and 4.

6. If the initial insurance policies required by this Agreement expire prior to the expiration or termination of this Agreement, renewal Certificates of Insurance for such policies shall be furnished at least thirty (30) days prior to the date of their expiration.

7. The Provider's insurance, including that applicable to the Authority as a named insured, shall apply on a primary basis with respect to performance of Services under this Agreement.

VII. PERFORMANCE BOND

The Provider shall furnish a performance bond in form and substance satisfactory to the Authority in an amount equal to the estimated compensation for the first year of this Agreement based on an average of 2,500 wet tons per month.

VIII. TERMINATION

This Agreement may be terminated by either party by providing fifteen (15) calendar days prior written notice in the event of substantial failure to perform in accordance with the terms hereof by the other party through no fault of the terminating party. The Authority shall also have a right to terminate this Agreement for convenience at any time by giving thirty (30) calendar days written notice to the Provider. In the event the Services of the Provider are terminated for convenience by the Authority, the Provider shall be compensated for the Services provided up to the date of termination.

IX. INDEMNIFICATION

A. Indemnification of the Authority by Provider. The Provider shall indemnify, defend and hold the Authority, and its officers, directors, employees and agents (collectively, the "Indemnitees"), harmless from and against any and all damages, claims, losses, expenses, costs (including without limitation, investigation and remediation costs and reasonable expert and attorneys' fees and expenses), obligations, penalties, fines, and liabilities including without limitation liabilities arising under federal and state environmental laws, including CERCLA and any similar state laws (collectively, "Loss and Expense"), asserted against or suffered by an Indemnitee by reason of, or arising out of, (i) any breach of any representation, warranty, or covenant made by the Provider pursuant to this Agreement, (ii) any failure by the Provider to perform or fulfill any of its covenants or agreements set forth in this Agreement, (iii) any litigation, order, proceeding, or claim by any third party, including without limitation

any Governmental Authorities, relating in any way to the obligations of the Provider under this Agreement, or (iv) any failure of the Provider to comply with any Applicable Laws and Regulations and applicable Permits. Such obligation to indemnify shall not apply where the Loss and Expense is due solely and directly to the willful misconduct of an Indemnitee.

B. Procedure for Indemnification. If an Indemnitee believes that it has suffered or incurred any Loss and Expense, or if it is presented with a claim for a Loss or Expense, such Indemnitee shall notify the Provider promptly in writing describing such Loss and Expense, the amount thereof, if known, and the method of computation of such Loss and Expense, all with reasonable particularity. If any action at law, suit, or proceeding in equity is instituted by a third party, including any Governmental Authority, with respect to which any Indemnitee intends to claim any liability or expense as Loss and Expense under this Article IX such Indemnitee shall promptly notify the Provider of such action, suit, or proceeding.

C. Provider's Right to Conduct Litigation. Subject to the last sentence of this Article IX, Section C, the Provider shall have the right to conduct and control, through counsel of its own choosing and at its own cost and expense, any third party claim, action, or suit (including any proceeding commenced by any Governmental Authority), but the applicable Indemnitee may, at its election, participate in the defense of any such claim, action, or suit at its sole cost and expense; provided that if the Provider shall fail to undertake the defense of any such claim, action, or suit within five (5) days of notice thereof from the Indemnitee, then the Indemnitee may defend, through counsel of its own choosing and at the Provider's cost and expense, such claim, action, or suit and (so long as it gives the Provider at least fifteen (15) days' notice of the terms of the proposed settlement thereof and permits the Provider to then undertake the defense thereof) may settle such claim, action, or suit, and recover from the Provider the amount of such settlement or of any judgment and the cost and expenses of such defense. The Provider shall not compromise or settle any third party claim, action, or suit without the prior written consent of the applicable Indemnitee, which consent will not be unreasonably withheld or delayed.

X. MISCELLANEOUS

A. Assignment. Neither the Authority nor the Provider will assign or transfer their interest in this Agreement without the written consent of the other; provided, however, that the Provider may assign its rights, obligations, and interests hereunder to any affiliate that is a successor-in-interest to all or substantially all of the assets of the Provider without the Authority's consent, provided that substantially all of the key project personnel of the Provider remain on the engagement. Any attempted assignment in contravention of the foregoing shall be null and void.

B. Confidential Information. During all times that the Provider is engaged on behalf of the Authority and at all times subsequent to the date of this Agreement, all discussions between the Authority and the Provider and all information relevant to

the business of the Authority not otherwise being a matter of public record shall be deemed to be confidential (the "Confidential Information"). All such Confidential Information shall be protected by the Provider and shall not be revealed to other persons without the express written permission of the Authority, unless mandated by order of the court. Information shall not be deemed confidential if (a) it is publicly known, (b) it was disclosed to the Provider by a third party without violating this Agreement, (c) the Provider can prove it learned of such information other than through the Authority, (d) it was disclosed with the Authority's written consent, or (e) it is required to be disclosed by a court of competent jurisdiction, administrative agency, or governmental body, or by law, rule, or regulation, or by applicable regulatory or professional standards. The Provider shall carry out its obligations hereunder using the same degree of care that it uses in protecting its own proprietary information, but at least a reasonable degree of care. Provided that the Provider shall have met the foregoing standard of care, the Provider shall not be in breach of this Agreement and shall not be liable or responsible for any inadvertent or accidental disclosure of Confidential Information.

The Provider acknowledges and recognizes that any use by it or by others of such Confidential Information other than in the service or for the benefit of the Authority would cause irreparable damage to the Authority. In the event of any breach of the terms of this paragraph, the Authority may apply to any court for an injunction, temporary and/or permanent, to prevent any violation of this paragraph. The exercise of this remedy does not preclude the Authority's right to pursue all other legal and equitable remedies available to it.

C. Subcontractors. In the event the Provider, during the course of the work under this Agreement, requires the services of any subcontractors in connection with Services covered by this Agreement, the Provider must secure the prior written approval of the Authority. Any attempted subcontract in contravention of the foregoing shall be null and void. Once the Authority's approval is obtained, the Provider shall bind the subcontractor by written contract to observe and be fully bound by all terms, conditions, and provisions of this Agreement as appropriate to the work to be performed. It shall be the Provider's duty to verify and enforce compliance with such terms, conditions, and provisions.

D. Notices. Whenever either party desires to give notice unto the other, it must be given by written notice, sent by electronic mail and followed by certified United States mail, with return receipt requested, addressed to the party for whom it is intended at the place last written, as the place for giving of notice in compliance with the provisions of this paragraph. For the present, the parties designate the following as the respective places of giving of notice to wit:

_____

_____
Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, Pennsylvania 15233
E-mail: _____@alcosan.org

_____

_____

_____

_____

E. Records. The Provider agrees to retain all records relating to the Services for as long as applicable law requires, or twenty-five (25) years from the expiration of this Agreement, whichever is longer.

F. Jurisdiction and Venue. In the event a suit is brought in connection with any claim or dispute arising under this Agreement, the Provider hereby covenants, consents, and yields to the jurisdiction of the Commonwealth of Pennsylvania, Civil Courts of Allegheny County.

G. Extent of Agreement. This Agreement, as herein described (and including the recitals and exhibits hereto and the Proposal Documents, all of which are hereby fully incorporated herein), represents the entire integrated understanding and agreement between the Authority and the Provider, and supersedes all prior negotiations, representations, or agreements, written or oral, with respect to the subject matter hereof. This Agreement may not be amended, changed, modified, or otherwise altered in any way, at any time after the execution hereof, except by approval of the Authority Board and the Provider.

H. Force Majeure. Delay in performance or non-performance of all or any portion of the Services required hereunder by the Provider, or delay in performance or non-performance of all or any portion of the obligations required hereunder by the Authority, shall be excused to the extent such failure or non-performance is caused by Force Majeure. For purposes of this Agreement, "Force Majeure" shall mean any cause or agency beyond the reasonable control of the Provider or the Authority, as the case may be, that makes performance of all or a portion of the Services or the obligations impossible, including without limitation fire, flood, sabotage, embargo, strike, explosion, accident, riot, pandemic, and acts of God; provided, that, as to the Provider, naturally inclement weather occurring at the Plant shall not be considered Force Majeure and shall not excuse the Provider's performance hereunder. The party suffering the Force Majeure event hereunder shall promptly provide written notice to

the other of any Force Majeure event, explaining the nature and expected duration thereof, and shall act diligently to remedy the interruption or delay if it is reasonably capable of being remedied. In the event a Force Majeure event (for either party) extends for more than thirty (30) days, this Agreement may be terminated by the Authority upon written notice thereof to the Provider. In the event of a Force Majeure event compelling the Provider to allocate performance of the Services with other services it is providing to other parties, the Provider shall make such allocation in a manner that ensures the Authority of at least the same portion of the Provider's total services as existed prior to the Force Majeure event. Notwithstanding the foregoing, the Provider hereby acknowledges that no additional payments or adjustments to the payment shall be made by the Authority hereunder as a result of any delay in the performance of the Services pursuant to a Force Majeure event.

I. Choice of Law. This Agreement will be governed by the laws of the Commonwealth of Pennsylvania, without regard to the choice of law principles thereof.

J. Titles Not to Limit Text. The titles or headings of the various divisions, sections, parts, paragraphs, or subparagraphs of this Agreement and the Proposal Documents are for convenience of reference only and are not intended to limit, and shall not be construed as in any way limiting, the application of the text.

K. Interpretation. Words of any gender used in this Agreement and the Proposal Documents shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, and vice versa, unless the context otherwise requires.

When words or phrases that have a well-known technical or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with that meaning unless defined otherwise in this Agreement or the Proposal Documents.

Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to the Applicable Laws and Regulations of any Governmental Authority, whether such reference be specific or by implication, shall mean the latest standard specifications, manuals, or codes, or laws, or regulations in effect at the time of receipt of the Proposals pursuant to the Proposal Documents, except as may be otherwise specifically stated. However, no provision of any reference, standard, specification, manual, or code (whether or not specifically incorporated by reference in the Proposal Documents) shall be effective to change the duties and responsibilities of the Authority or the Provider or any of their consultants, subcontractors, agents, or employees from those set forth in this Agreement or the Proposal Documents.

L. Partial Invalidity. In the event that any one or more of the provisions of this Agreement are found by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions of the Agreement shall remain in full force

and effect. The Authority and the Provider agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

M. Provisions Required by Law Deemed Inserted. Each and every provision of the laws and regulations required by law to be inserted in this Agreement shall be deemed to be inserted herein, and the Agreement shall be read and enforced as though they were included herein, and if through mistake or otherwise such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Agreement will forthwith be physically amended to make such insertion or to correct such insertion.

IN WITNESS WHEREOF, the Authority has caused these presents to be executed in its name by its Authority Executive Director and attested and its official Seal to be hereunto affixed, and the Provider has hereunto set its hand and Seal the day and year first written above.

ATTEST:

ALLEGHENY COUNTY SANITARY AUTHORITY

_____
Witness:

By:_____
Executive Director

Seal:

ATTEST:

_____

_____
Witness:

By:_____
Title:

_____
(Print or Type Name Above)

_____
(Print or Type Name Above)

Seal:

EXHIBIT A
TO
SERVICE AGREEMENT

Item No.	**Description**	**Min. % Beneficial Use**	**Written Price (per wet ton)**	**Price in Figures**
1	Services necessary to beneficially use the Authority's Biosolids and/or process the Authority's Unlimed Solids for Beneficial Use pursuant to the following method(s):			
	Option A: _____ _____ _____	Option A: _____%	_____ Dollars and _____ Cents	$_____
	Option B: _____ _____ _____	Option B: _____%	_____ Dollars and _____ Cents	$_____
	Option C: _____ _____ _____	Option C: _____%	_____ Dollars and _____ Cents	$_____
	Option D: _____ _____ _____	Option D: _____%	_____ Dollars and _____ Cents	$_____
		Aggregate Beneficial Use Target (sum of above Min. %'s)**:** **_____%**		

2	Services necessary to pick up the Authority's Biosolids and Unlimed Solids at the Plant and dispose at landfills.		_____ Dollars and _____ Cents	$_____
3	Services necessary to pick up the Authority's Biosolids and Unlimed Solids at Beneficial Use sites (as referenced in item 1) and dispose at landfills.		_____ Dollars and _____ Cents	$_____