



**TOWN OF HARRISBURG, NORTH CAROLINA
VENTURE CHURCH AUDITORIUM
4245 MAIN STREET
BOARD OF ADJUSTMENT MEETING**

**March 4, 2025
5:30 PM**

AGENDA

1. CALL TO ORDER

A. SPECIAL PRESENTATIONS

1. PUBLIC ACCESS TO LIVE MEETING VIA YOUTUBE

The Venture Church Auditorium (4245 Main Street) will be open for the public to attend the meeting in person.

The public has the option to watch the meeting virtually via the YouTube platform using the link below or attend in person.

All persons wishing to address the Board on a specific agenda item must be present in person.

<https://www.youtube.com/@HarrisburgNC/streams>

2. ADOPT AGENDA

2. CONSENT AGENDA

A. Consideration of Approval of minutes from January 15, 2025 meeting

3. PUBLIC HEARINGS - CONTINUED ITEM

A. H-2023-02-SUP Venator Chemicals: Consider a request by Venator Chemicals for a special use permit (SUP) to add an onsite industrial landfill supporting operations at its facilities located at 5910 Pharr Mill Road. This public hearing was continued from the January 15th, 2025 Board of Adjustment Meeting.

4. OLD BUSINESS

5. NEW BUSINESS

6. ADJOURNMENT

Vision Statement

Harrisburg will be a distinctive, family-focused community where memories are made.

Mission Statement

Together, we enhance our quality of life by collaborating, planning, and investing to create our community of choice.



TOWN OF HARRISBURG

Agenda Item Details

Title:

Consideration of Approval of minutes from January 15, 2025 meeting

Presenting Personnel:

Carly Bedgood, Planning Support Specialist

Suggested Motion or Action:

Motion to approve minutes of January 15, 2025 as presented.

Description/Background:

See attached minutes from January 15, 2025 Board of Adjustment meeting.

Recommendation:

Approve as presented.

Fiscal Impact:

None.

Attachments:

1. BOA 1-15-25

**TOWN OF HARRISBURG, NORTH CAROLINA
VENTURE CHURCH AUDITORIUM
BOARD OF ADJUSTMENT MEETING
JANUARY 15, 2025
6:30 PM**

MINUTES

1. CALL TO ORDER

Ian Patrick called the meeting to order.

PRESENT: Ian Patrick (Chair), Monica Long, Steven Larson (ETJ), Brandon Ross, Michael Branham (Vice Chair), Sonya Rorie (ALT 2) present and sitting with the audience, Nick Herman (Legal Counsel for BOA)

ABSENT: Kevin Schaffner (ALT 1)

STAFF: Zac Gordon, Shelley Dehart, Carly Bedgood, Rich Koch (Legal Counsel)

B. AGENDA ADOPTION

Monica Long made a motion to adopt the agenda as presented. Steven Larson seconded the motion. **The motion passed 5-0.**

2. CONSTENT AGENDA - NONE

3. PUBLIC HEARINGS

A. H-2023-02-SUP Venator Chemicals: Consider a request by Venator Chemicals for a special use permit (SUP) to add an onsite industrial landfill supporting operations at its facilities located at 5910 Pharr Mill Road.

Chair, Ian Patrick, started the meeting, letting the audience know the Board has received an official request from the attorneys for the applicant for a continuance of this matter and at this time he invited the applicant to address the board.

Attorney, Tom Terrell introduced himself indicating he represented the applicant, Venator Chemical, and presented a request for continuance until the regular scheduled meeting on March 4th and for that hearing to begin at 5:30pm being in the same location, Venture Church.

Chair, Ian Patrick, having heard the continuance request, asked Town Staff is they were in agreement to this request. Planning Director Zac Gordon responded yes. The Chairman asked Representatives for the Town, Rob Donham, Town Manager if they were in agreement and he responded yes.

Chair, Ian Patrick stated for the record that it is the Boards decision whether to approve or deny this request and he would need a motion to second and a simple majority to either approve or deny continuing this case to March 4th at our regularly scheduled meeting with a starting time of 5:30 pm. If the board sets a time and a date for this meeting, then public notice is not required but if the

January 15, 2025

BOA Minutes

board does not set a time or a date and just grants a continuance then public notice will be required including notifying abutting property owners. He asked if there were any questions or discussions from the board?

Michael Branham, Vice Chair, asked what the reasoning was for the continuation?

Tom Terrell, Legal Counsel for the Applicant replied that his client, Venator, did not know until last week that there were some documents that were put together by a consultant for the town and those documents were not shared with us. We requested them last week and it was not until yesterday that we were able to obtain them, and we have not only an obligation but a right to inspect those materials before the hearing.

Ian Patrick, Chair, not hearing anymore questions, Chairman again asked the Board if there is a motion to either approve or deny the continuance request?

MOTION:

Monica Long, Board Member, made a motion to continue this meeting until March 4th at 5:30 pm with a second from Steven Larson. **The motion was unanimously approved (5-0).**

4. OLD BUSINESS - NONE

5. NEW BUSINESS

6. ADJOURNMENT

There being no further business, Michael Branham made a motion to adjourn with a second from Monica Long. **The motion was unanimously approved (5-0).**

Adopted on the 4th of March 2025

Ian Patrick, Chairperson

Carly Bedgood, Board Secretary



TOWN OF HARRISBURG

Agenda Item Details

Title:

H-2023-02-SUP Venator Chemicals: Consider a request by Venator Chemicals for a special use permit (SUP) to add an onsite industrial landfill supporting operations at its facilities located at 5910 Pharr Mill Road. This public hearing was continued from the January 15th, 2025 Board of Adjustment Meeting.

Presenting Personnel:

Zac Gordon, Planning Director

Suggested Motion or Action:

After conducting a quasi-judicial public hearing to consider a request by Venator Chemicals for a special use permit (pursuant to Section 145.04.03 of the Unified Development Ordinance) to add an onsite industrial landfill supporting operations at its facilities located at 5910 Pharr Mill Road, the Board shall render a decision to approve, approve with conditions, or deny the request for a special use permit. This decision shall be based on "Findings of Fact", which address the criteria for the granting of a Special Use Permit, as noted in Section 145.04.03.C, and the Common Decision Criteria found in Section 145.01.07.

Description/Background:

Venator Chemicals operates a chemical processing facility at 5910 Pharr Mill Road. This use is classified by the Town's Unified Development Ordinance (UDO) as a "Heavy Industrial" use. Since March 18, 2002, Venator has been operating under an approved Special Use Permit (previously called a "Conditional Use Permit) issued by the Town. This special use permit allows for expansion of the existing facility that includes storage tanks, a railroad spur to the proposed tank location, and additional parking area. Any further expansion of this facility requires a special use permit. The current request by Venator is for a special use permit to allow for the addition of an on-site industrial landfill in support of its current and future operations. According to Venator's application, the proposed landfill will support the existing outdated settling lagoon by removing solids and placing them in the landfill, allowing for the continued operations of its facilities through the planned long-term disposal of process wastewater sediments (see staff report for additional information).

A public hearing for the requested special use permit was scheduled and opened on Wednesday, January 15, 2025, at 6:30 pm. At this meeting, the applicant presented a request to continue the public hearing until Tuesday, March 4, 2025, at 5:30 pm, at the same location. This request was unanimously approved by the Board of Adjustment.

Recommendation:

The applicant has the burden of production to demonstrate compliance with both the "Special Use Permit – Specific Review Criteria" and "Common Decision Criteria," in order to be granted a "Special Use Permit." Once the applicant meets that burden, the burden of production shifts to the Town and the opponents of the application. The applicant will be presenting evidence and testimony in support of the subject Special Use Permit Application. The Town has separate legal counsel representing them and will be presenting evidence and testimony in opposition to the Special Use Permit application. Evidence and testimony presented from any party (applicant, Town, or Town Residents) must be substantial, material, and competent for it to be considered. A decision criteria worksheet will be provided at the public hearing for board members to track the evidence they consider either supporting or not supporting that criterion.

If the Board finds the proposed industrial landfill use meets the applicable criteria for granting the requested special use permit, staff recommends that the approval be made subject to the following conditions:

1. The applicant shall obtain permit approval from all state, local, or federal agencies.

2. Any incidents at the facility that are required to be reported to permitting agencies shall also be reported to the Town Planning Department.
3. Construction documents shall be submitted for review and approval in compliance with the Harrisburg Unified Development Ordinance (UDO) prior to any construction activity. Copies of the state and federal permits and approval shall be submitted to the Town prior to release for construction.
4. Town of Harrisburg requires third party inspections during construction activities to be contracted by the town and paid for by the applicant. The applicant shall enter into an MOU agreement for services.

Fiscal Impact:

None

Attachments:

1. H-2023-02-SUP_Venator Chemical_Continued
2. Attachment A_Application
3. Attachment B_WombleBondDickson Application Package_4_16_24
4. Attachment C_Sediment Sampling 8_2024
5. Attachment D - Venator Complete Application Letter_9_24_24
6. Attachment E_Public Hearing Venator SUP_1_2025
7. Attachment F_Terracon Review of Venator Sediment Sampling_20240919



Special Use Permit H-2023-02-SUP
Town of Harrisburg SUP Request
March 4, 2025

Applicant: Jonna Stein
EHS Manager for Venator
5910 Pharr Mill Road
Harrisburg, NC 28075

Property Owner: Kurt Odgen on behalf of Venator Chemicals, LLC

Property Location: 5910 Pharr Mill Road, Harrisburg, NC 28075
PIN # 5517-69-2881-0000

Current Zoning: EC (Employment Center)

Property Size: 100.58 acres +/-

Staff Report By: Shelley DeHart, Assistant Planning Director

Request: **The applicant has requested a Special Use Permit to add an onsite industrial landfill associated with an existing heavy industrial chemical manufacturing company, which is an allowed use subject to Special Use review criteria in Section 140.04.06 of the Unified Development Ordinance.**

BACKGROUND: Venator Chemicals operates a chemical processing facility at 5910 Pharr Mill Road. This use is classified by the Unified Development Ordinance as a “Heavy Industrial” use. Since March 18, 2002, Venator has been operating under an approved Special Use Permit (previously called a “Conditional Use Permit”). This special use permit allows for the expansion of the existing facility that includes storage tanks, a railroad spur to the tank location, and an additional parking area. Any further expansion of this facility requires a special use permit. The current request by Venator is for a special use permit to allow for the addition of an on-site industrial landfill in support of its current and future operations. According to Venator’s application, the proposed landfill will support the existing outdated settling lagoon by removing solids and placing them in the landfill, allowing for the continued operations of its facilities through the planned long-term disposal of processed wastewater sediments.

A public hearing was scheduled and opened on Wednesday, January 15, 2025, at 6:30 pm. The applicant presented a request to continue the public hearing until Tuesday, March 4, 2025, at 5:30 pm, at the same location. This request was unanimously approved by the Board of Adjustment.

H-2023-02-SUP

March 4, 2025

As required by the UDO:

1. The applicant has submitted a complete application (along with required fees) which includes the Findings of Fact sheet.
2. Abutting property owners have been notified of the public hearing by U.S. Mail. A subsequent notice regarding the public hearing continuance was also sent by U.S. Mail.
3. A legal notice has been published pursuant to the UDO.
4. A public hearing sign has been placed on the property.

REVIEW CRITERIA:

The Board of Adjustment shall consider the decision criteria found in Section 140.04.06 and 145.04.03 of the UDO, and “Common Decision Criteria” found in Table 145.01.07-1 of the UDO. For ease of review and consideration, all of the decision criteria are enumerated below.

1. *HALUP*. The proposed special use will be in harmony with the area in which it is to be located and in general conformance with the HALUP;
2. *Ingress and Egress*. Adequate measures shall be taken to provide ingress and egress so designed as to minimize traffic hazards and to minimize traffic congestion on the public roads;
3. *Nuisances*. The proposed use shall not be noxious or offensive by reason of vibration, noise, odor, dust, smoke or gas;
4. *Orderly Development*. The establishment of the proposed use shall not impede the orderly development and improvement of surrounding property for uses permitted within the zoning district;
5. *Health, Safety, and Welfare*. The establishment, maintenance, and operation of the proposed use will not be detrimental to or endanger the public health, safety, or general welfare; and
6. The request complies with the applicable standards of this UDO and the Town Code, and the applicant has provided proof of compliance with any preceding and applicable county, state, or federal requirements; and
7. The request substantially conforms to any associated prior approval for the development, including, but not limited to: Special Use Permit, Conditional Zoning, Site Development Plan, etc.; and
8. The request promotes the purposes of this UDO as established in 144.01.02, *Purposes*, and in other applicable purpose statements in this UDO; and
9. The establishment, maintenance, or operation of the proposed use shall not be detrimental to or endanger the public health, safety, or general welfare (Duplicate to #5); and

H-2023-02-SUP

March 4, 2025

10. The administrative body has considered the recommendation of Staff in the public meeting or hearing; and
11. The request is consistent with applicable policies of the most recently adopted HALUP, any applicable utility plans, and adopted capital improvements plans; or, if it addresses a topic that is not contained or not fully developed in the HALUP, the request does not impair the implementation of the HALUP; and
12. Adequate facilities, including public or private utilities, solid waste service, roads, drainage, and other improvements are present or are planned to be provided; and
13. The request demonstrates compatibility with surrounding conforming and permitted land uses and structures and with the essential character of the general vicinity of design, façade treatment, setbacks, building materials, and reasonably anticipated negative impacts; and
14. *Other Sections.* Compliance with any other applicable Sections of this UDO.

Table 145.01.07-1, Common Decision Criteria Applicability			
Common Decision Criteria	All Applications ¹	Legislative Applications	Quasi-Judicial Applications ¹
The request complies with the applicable standards of this UDO and the Town Code, and the applicant has provided proof of compliance with any preceding and applicable county, state, or federal requirements.	♦		
The request substantially conforms to any associated prior approval for the development, including, but not limited to: Special Use Permit, Conditional Zoning, Site Development Plan, etc.	♦		
The request promotes the purposes of this UDO as established in 144.01.02, <i>Purposes</i> , and in other applicable purpose statements in this UDO.	♦		
The establishment, maintenance, or operation of the proposed use shall not be detrimental to or endanger the public health, safety, or general welfare	♦		
The administrative body has considered the recommendation of Staff in the public meeting or hearing.		♦	♦
The request is consistent with applicable policies of the most recently adopted HALUP, any applicable utility plans, and adopted capital improvements plans; or, if it addresses a topic that is not contained or not fully developed in the HALUP, the request does not impair the implementation of the HALUP.		♦	♦
Adequate facilities, including public or private utilities, solid waste service, roads, drainage, and other improvements are present or are planned to be provided.		♦ ²	♦ ³
The request demonstrates compatibility with surrounding conforming and permitted land uses and structures and with the essential character of the general vicinity of design, façade treatment, setbacks, building materials, and reasonably anticipated negative impacts.		♦ ²	♦
TABLE NOTES: ♦ = Basic review criteria applies ¹ Excluding Appeals of Administrative Decisions ² Excluding UDO Text Amendments ³ Excluding Variances			

The burden of production is on the applicant to show that an application complies with applicable decision criteria. Once the applicant meets that burden, the burden of production shifts to the Town and the opponents of the application. The applicant has provided a letter of narrative responses to the decision criteria supporting its application and will be providing testimony at the public hearing.

Staff Analysis

The subject property is approximately 100.58 acres in size and developed with a chemical manufacturing facility with ancillary onsite facilities. The zoning designation of the property is EC, Employment Center and its Future Land Use Category is Light Industrial. The purpose of this district is to provide for areas of light industrial, office, and multi-tenant flex space that are suitable based upon adjacent land uses, access to transportation, and the availability of public services and facilities (Table 140.01.03-1, Zoning Districts in the UDO.) This district should be located so that it is unencumbered by nearby residential or mixed-use development with direct access to or within proximity to a major or minor thoroughfare. Heavy Industrial use is permissible within the EC District subject to an approval of a Special Use Permit.

The natural environment includes a healthy stand of hardwood and evergreen trees and a portion of the Rocky River that flows along the western and southern property lines. The river area includes associated floodway and floodplain on the subject property. The Rocky River is an impaired 303d listed waterbody, as classified by the EPA.



The proposed area of disturbance is over 7 acres divided between the proposed onsite industrial landfill (3.3 acres) and proposed borrow area (3.5). These development areas are currently wooded with a mix of hardwoods and evergreen trees.

H-2023-02-SUP

March 4, 2025

The proposal to construct the onsite industrial landfill for the purpose of managing the long-term disposal of process wastewater sediments associated with the heavy industrial use, brought into question the sediment contents for staff the nature of the existing settling lagoon sediment contents. Accordingly, staff requested a report on the contents of sediment from the pond, which is to be placed within the proposed landfill and that the report identifies all constituent elements and provides the TCLP (Toxicity Characteristic Leaching Procedure) test results. The applicant provided a summary of a 2017 sediment sampling report, followed by an updated sediment sampling dated 8/30/2024 per the Town's request. Based on the expertise needed to evaluate the contents of these reports, the Town contracted with an environmental consulting firm, Terracon, to provide the Town with a detailed analysis of this information. The consultant's findings were provided to the Town as a memorandum dated September 19, 2024, and are included as Attachment F of this report.

RECOMMENDATION:

As previously noted, the applicant has the burden of production to demonstrate compliance with both the "Special Use Permit – Specific Review Criteria" and "Common Decision Criteria," in order to be granted a "Special Use Permit." Once the applicant meets that burden, the burden of production shifts to the Town and the opponents of the application. The applicant will be presenting evidence and testimony in support of the subject Special Use Permit Application. The Town has separate legal counsel representing them and will be presenting evidence and testimony in opposition to the Special Use Permit application. Evidence and testimony presented from any party (applicant, Town, or Town Residents) must be substantial, material, and competent for it to be considered. A decision criteria worksheet will be provided at the public hearing for board members to track the evidence they consider either supporting or not supporting that criterion.

If the Board finds the proposed industrial landfill use meets the applicable criteria for granting the requested special use permit, staff recommends that the approval be made subject to the following conditions:

1. The applicant shall obtain permit approval from all state, local, or federal agencies.
2. Any incidents at the facility that are required to be reported to permitting agencies shall also be reported to the Town Planning Department.
3. Construction documents shall be submitted for review and approval in compliance with the Harrisburg Unified Development Ordinance (UDO) prior to any construction activity. Copies of the state and federal permits and approval shall be submitted to the Town prior to release for construction.
4. Town of Harrisburg requires third party inspections during construction activities to be contracted by the town and paid for by the applicant. The applicant shall enter into an MOU agreement for services.

Attachment A – Application

Attachment B – Complete Application Submittal with Supporting Documents dated 4/16/24.

Attachment C – Sediment Sampling Report Dated 8/30/2024.

Attachment D – Complete Application Letter dated 9/24/24.

Attachment E – Public Notice for January 15, 2025 & March 4, 2025, Public Hearing

Attachment F - Venator Lagoon Sediment Sampling Result Memorandum from Terracon
(9/19/2024)



Quasi-Judicial Approval Application

1. Application Type (select all that apply)

- Variance
 Floodplain Variance
 Special Use Permit
 Appeal of Administrative Decision

2. Project Information

- a. Project Name: Venator Chemicals - Onsite Industrial Landfill
- b. Project Location/Address: 5910 Pharr Mill Road 28075
- c. Tax Map and Parcel Number (PIN): 551 769 288 100 00
- d. Zoning: Existing: _____ Proposed: _____
- e. Land Use: Existing: _____ Proposed: _____
- f. Description of Request (attach separate sheet if needed):

See Attached Documents


3. Contact Information

- a. Project Manager/Contact Person: Michael Thomas, "Construction Project Manager"
 Company: Venator Chemicals LLC
 Address: 5910 Pharr Mill Road City, State, Zip: Harrisburg NC 28075
 Phone Number: 704-455-4139 Email Address: michael_thomas@venatorcorp.com
- b. Applicant Name (if different than above): Jonna Stein, "EHS Manager"
 Company: Venator Chemicals LLC
 Address: 5910 Pharr Mill Road City, State, Zip: Harrisburg NC 28075
 Phone Number: 704-455-4171 Email Address: jonna_stein@venatorcorp.com
- c. Owner Name: Kurt Odgen on behalf of Venator Chemicals LLC
 Company: Venator Chemicals LLC
 Address: 5910 Pharr Mill Road City, State, Zip: Harrisburg NC 28075
 Phone Number: _____ Email Address: _____

4. Owner's Consent

Kurt Ogden on behalf of Venator Chemicals LLC ("Owner") certifies that it is the owner of the property located at 5910 Pharr Mill Road, Harrisburg NC 28075 ("Subject Property") and expressly consents to the use of the Subject Property as described in this application and to all conditions that may be agreed to as a part of the approval of this application, which may be imposed by the decision making board.

Owner hereby authorizes, Michael Thomas as agent, to file this application and represent Owner at any and all meetings and hearings required for the approval of this application.

Owner's Signature:  Date: 22/11/2023

5. Affidavit of Completeness and Accuracy (to be completed by the individual submitting the application)

Project Name: Venator Chemical - Onsite Industrial Landfill Submittal Date: _____

STATEMENT OF COMPLETENESS AND ACCURACY:

I hereby certify all property owners have full knowledge the property they own is the subject of this application. I hereby certify the statements or information made in any paper or plans submitted herewith are true and correct to the best of my knowledge. I understand this application, related application material and all attachments become official records of the Planning and Zoning Department of Harrisburg, North Carolina, and will not be returned.

I understand that any knowingly false, inaccurate or incomplete information provided by me will result in the denial, revocation or administrative withdrawal of this application, request, approval or permit. I further acknowledge that additional information may be required to process this application. I further consent to the Town of Harrisburg to publish, copy or reproduce any copyrighted documents submitted as a part of this application for any third party. I further agree to all terms and conditions, which may be imposed as part of the approval of this application.

Applicant Name: Michael Thomas

Applicant Signature: Michael Thomas

6. Staff Use Only:

Record of Process

Date Received: 12/1/24

Application Number: H-2023-02-SUP

Is Application Complete? Yes 9/24/2024 No

Public Hearing Date(s): Special Meeting - 01/15/2025

Published Notice Date: 01/04/2025

Mailed Notice Date: 01/03/2025

Posted Notice Date: 01/03/2025

Final Action Applicant Notification Mailed Date: TBD

Town Staff Signature: _____

Record of Decision

Reviewed By: _____

Recommendation: Approve Deny

Final Action: Approve Deny

7. Required Attachments

All development application submittals must be accompanied by:

- Applicable fee(s) (see Master Fee Schedule in Appendix B of the Development Guidebook);
- Attachments listed in under the pertinent application;
- Case numbers of other related development applications; and
- Any additional information or attachments required by the Town Attorney, Director or other Town staff, Historic Preservation Commission, Planning and Zoning Board, Board of Adjustment, or Town Council.

Consult staff during pre-application meeting for any required paper copies consult staff during pre-application meeting for any required paper copies.

<p>Variance</p> <ol style="list-style-type: none"> 1. List of all abutting property owners' name, mailing address, and PINs 2. Sketch plan showing: <ol style="list-style-type: none"> a. Boundaries of property b. Size and location of all existing building(s) c. Size and location of all proposed buildings, parking facilities, and accessory structures d. Number, location, and type of any proposed screening or buffering 3. List of the UDO section(s) seeking relief from 4. Provide reasons for seeking variance 5. Explanation of how request meets the specific review criteria in UDO Section 145.04.01, <i>Variance</i> 	<p>Floodplain Variance</p> <ol style="list-style-type: none"> 1. List of all abutting property owners' name, mailing address, and PINs 2. Sketch plan showing: <ol style="list-style-type: none"> a. Boundaries of property b. Size and location of all existing building(s) c. Size and location of all proposed buildings, parking facilities, and accessory structures d. Number, location, and type of any proposed screening or buffering 3. List of the specific section(s) in UDO Chapter 143 seeking relief from 4. Provide reasons for seeking variance 5. Explanation of how request meets the specific review criteria in UDO Section 145.04.02, <i>Variance, Floodplain</i>
<p>Special Use Permit</p> <ol style="list-style-type: none"> 1. List of all abutting property owners' name, mailing address, and PINs 2. Land use of all abutting properties 3. Explanation of how request meets the specific review criteria in UDO Section 145.04.03, <i>Special Use Permit</i> 4. Sketch Plan, Traffic Impact Study, etc. if determined necessary 	<p>Appeal of Administrative Decision</p> <ol style="list-style-type: none"> 1. A written letter describing the request including applicant's interpretation of the provision(s) in question and reasons for that interpretation. Applicant may be required to prove any facts included in letter to the BOA

VENATOR

Harrisburg Planning and Zoning Department
 4100 Main Street
 Harrisburg, NC 28075

Property Location

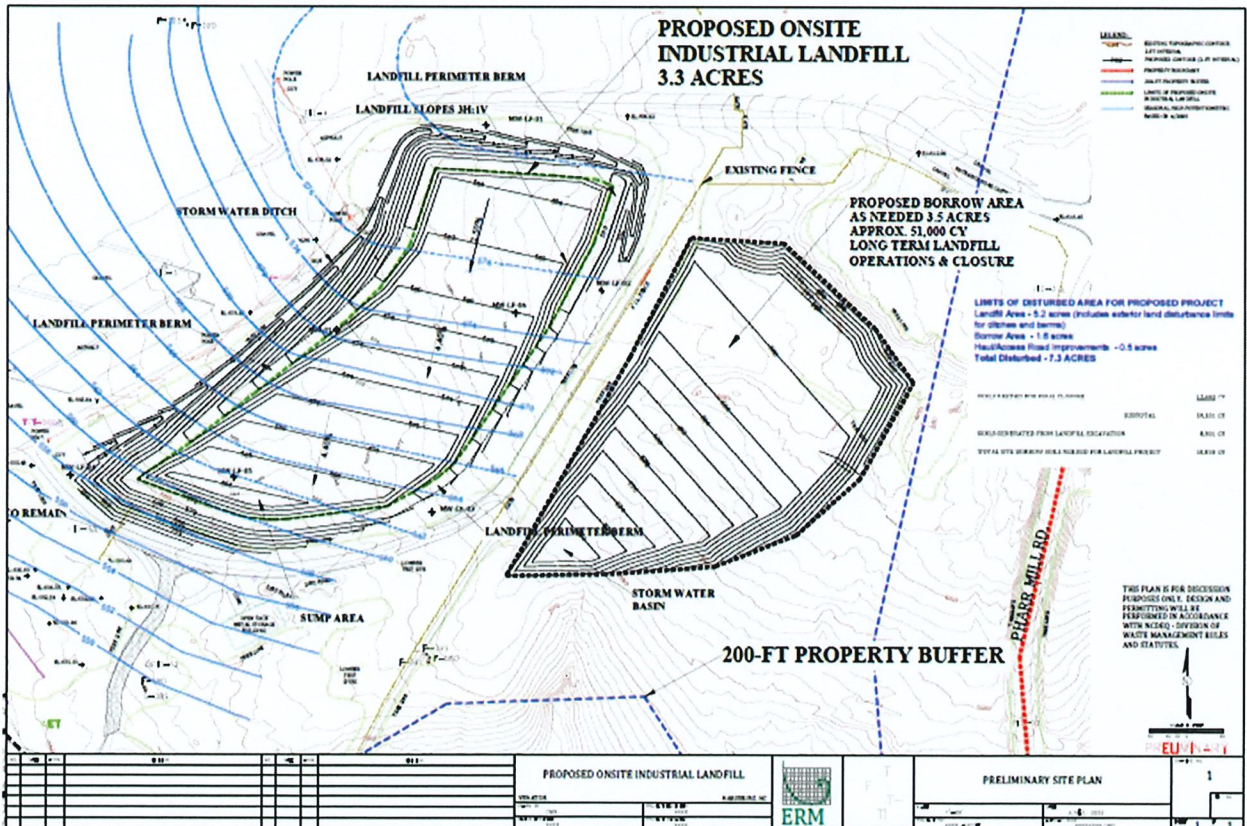
Physical Location: 5910 Pharr Mill Rd Harrisburg, NC 28075
 Parcel I.D. 55176928810000

Venator proposed landfill info:

Venator wishes to develop an onsite industrial landfill to upgrade an outdated settling lagoon by removing solids and placing them in a new nonhazardous Industrial Solid Waste Landfill (ISWL).

The proposed landfill will also serve as long-term disposal for management of process wastewater sediments. In addition, once the sediments have been removed, SWMU-5 will be re-engineered with an impermeable liner to prevent future leaching to the subsurface environment. Once completed, the re-configured SWMU 5 will continue to operate as a wastewater settling lagoon.

Venator proposed landfill



5910 Pharr Mill Road, Harrisburg, NC 28075, USA
 Tel: 704-455-5182 Fax: 704-454-7390 info@venatorcorp.com www.venatorcorp.com

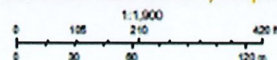
VENATOR

Heritage Tree Mitigation

Venator Heritage Trees



10/30/2023, 9:46:58 AM

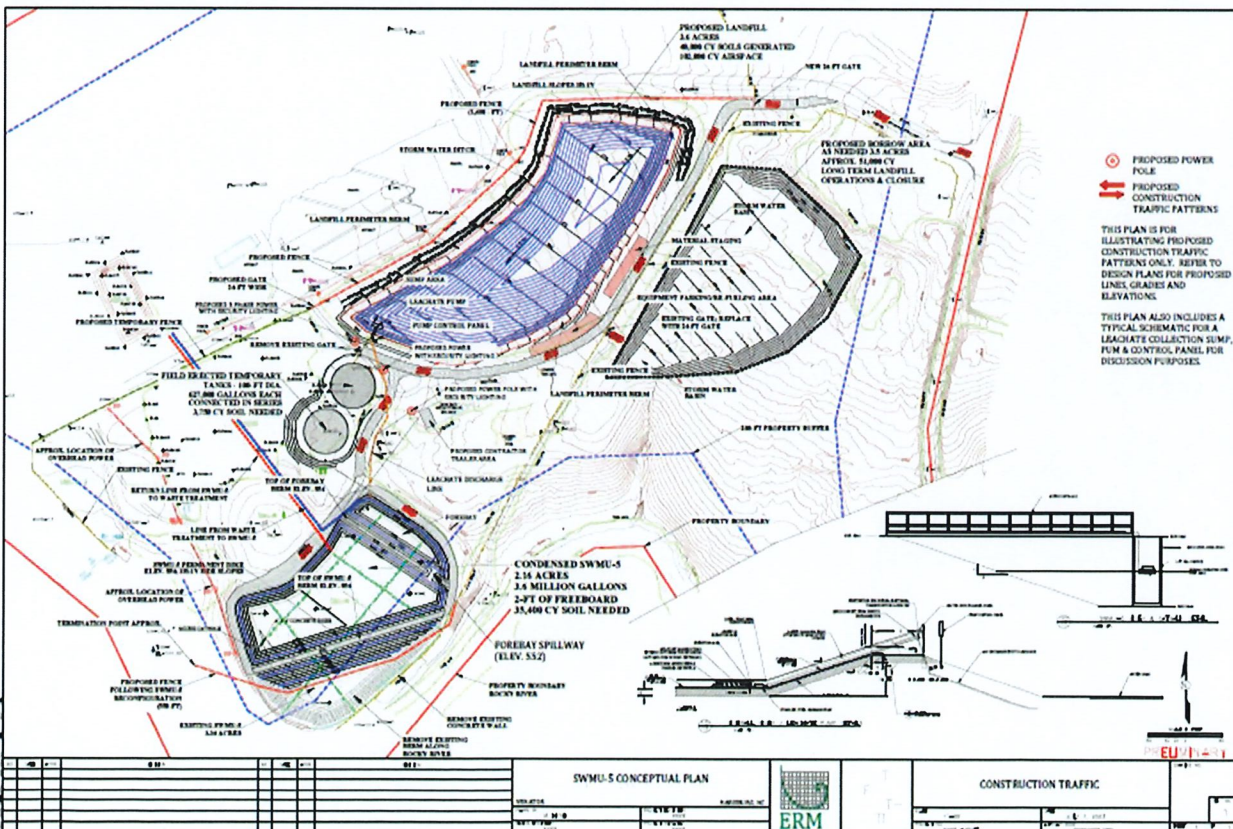


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Site Plan Construction:



VENATOR

If you have any questions or concerns regarding this project, please contact me by email at Michael_thomas@venatorcorp.com or by phone 704-455-4139

Sincerely,


Michael Thomas
Construction Project Manager
Venator Chemicals LLC

MEMORANDUM

Via Hand Delivery

Preston M. Mitchell, AICP
Land Planner
Direct Dial: 919-755-2142
E-mail: Preston.Mitchell@wbd-us.com

TO: Ms. Shelley DeHart, AICP
Assistant Planning Director
Town of Harrisburg, NC

FROM: Preston M. Mitchell 

DATE: April 16, 2024

RE: Venator Chemicals | Special Use Permit
Delivery of Complete Application & Supporting Documentation

Dear Ms. DeHart:

Please allow this binder to serve as hand delivery of the full and complete application, supporting documentation, and response or request for additional information, to date, regarding the Venator Chemicals Onsite Industrial Landfill request for Special Use Permit ("SUP").

TABLE OF CONTENTS:

- 101: Pre-Application Meeting Summary
- 102: Quasi-Judicial Approval Application & Letter of Intent
- 103: List of Property Owners' within 300-ft of Site
- 104: Abutting Properties Land Use & Zoning
- 105: Narrative Responses to SUP Decision Criteria
- 106: Site Plan Documentation
- 107: Illustrative Exhibits
- 108: Sediment Sampling Summary
- 109: Plan Review Comments Response for Information
- 110: Response for Information Regarding Tree Protection and Heritage Tree Replacement

PMM:pmm

Enclosures



PRE-APPLICATION MEETING SUMMARY

A pre-application meeting is required prior to submitting certain land development applications to the Town of Harrisburg. This pre-application meeting summary will be filled out at the pre-application meeting or in advance, and will be used as a cover sheet for your development application.

General Information

1. Project Name: Venator Chemicals - Onsite Industrial Landfill
2. Development Request Type:
 - REZONING RESIDENTIAL NON-RESIDENTIAL
 - OTHER _____
3. Property Location: 5910 Pharr Mill Road 28075
4. PIN(s): 551 -- 769 -- 288 ; 100 -- 00
5. Size of Parcel (square feet or acreage): 100.58
6. Street Frontage (feet): 1,840 feet
7. Current Land Use: EC
8. Flood Zone: NA

Type of Application Required (Check all that apply)

Rezoning

- Rezoning
- Conditional Rezoning

Residential (If no rezoning)

- Preliminary Plat
- Subdivision Construction Drawings
- Minor Plat
- Final Plat *(Please refer to Final Plat application and checklist)*
- Site Plan

Non-Residential (If no rezoning)

- Site Plan Review

Miscellaneous

- Conditional Use Permit
- Improvement Guarantee
- Performance Bond
- Sign Permit
- Zoning Clearance
- Variance
- Annexation
- Other

Site Plan Requirements

1. Will this request require a site plan? YES NO
2. Type of Plan (check all that apply):

Residential

- Preliminary Plat
- Subdivision Construction Drawings
- Minor Plat
- Final Plat
- Site Plan

Miscellaneous

- Architectural Elevations
- Landscaping Plan
- Lighting Plan
- Flood Prevention Plan
- Tree Survey

Non-Residential

- Major Site Plan
- Minor Site Plan

3. Has a copy of Appendix B been provided to the applicant, and have the requirements of Appendix B been reviewed by staff with the Applicant? YES NO N/A
4. Will this request require a Traffic Impact Analysis? YES NO N/A
5. Has a copy of Appendix F been provided to the applicant, and have the requirements of Appendix F been reviewed by staff with the Applicant? YES NO N/A
6. Has the applicant been made aware that a Scoping Meeting will need to take place between the applicant, the Town, NCDOT, and the Consultant, and that a Scoping Agreement will need to be signed prior to submitting an application? YES NO N/A
7. If elevations are required, has a copy of Appendix E been provided to the applicant, and have the requirements of Appendix E been reviewed by staff with the applicant? YES NO N/A

Storm Water Requirements

1. Is the site a development that cumulatively disturbs more than 10,000 SF or a redevelopment that cumulatively disturbs 1 acre or more? YES NO
2. If yes, has the Town of Harrisburg Stormwater Drainage Manual been made available to the applicant, and has staff explained the need for a Storm Water Concept Meeting? YES NO N/A

Review Fees

1. Planning/Zoning Required Review Fees (Check all that apply):

<input type="checkbox"/> Preliminary Plat	\$1000.00 plus \$25.00 per lots/ units	
<input type="checkbox"/> Recombination Plat	\$50.00 per map sheet	
<input type="checkbox"/> Sketch Plat Review	\$100.00	
<input type="checkbox"/> Subdivision Construction Drawings	\$2000.00 plus \$50.00 per acre	
<input type="checkbox"/> Minor Site Plan Review	\$500.00 plus \$5.00 per acre	
<input type="checkbox"/> Vested Rights	\$400.00	
<input type="checkbox"/> Vested Rights Extension	\$150.00	
<input type="checkbox"/> Minor Site Plan Final Inspection and COC Letter	\$50.00 Residential \$100 Commercial	
<input type="checkbox"/> Rezoning Amendment – Residential (<10 acres)	\$400.00 plus \$5.00 per acre	
<input type="checkbox"/> Rezoning Amendment - Nonresidential/Mixed Use	\$1000.00 plus \$25.00 per acre	
<input type="checkbox"/> Rezoning Amendment – Residential (>10 acres)	\$2500.00 plus \$25.00 per acre	
<input type="checkbox"/> Conditional District Rezoning	\$2500.00 plus \$25.00 per acre	
<input type="checkbox"/> Combined Residential Rezoning & Preliminary Plat	\$4000.00 plus \$25.00 per lot	
<input type="checkbox"/> Conditional Use Permit	\$1000.00 plus \$5.00 per acre	
<input type="checkbox"/> Re-advertising cost (due to applicant action)	Greater of \$200 or actual cost	
<input type="checkbox"/> Architectural Review	\$150.00	
<input type="checkbox"/> Appeal of Planning Board Decision on Arch. Review	\$250.00	
<input type="checkbox"/> Rezoning Protest Petition	\$250.00	
<input type="checkbox"/> Street Name Change Petition	\$500.00 plus street sign costs	
<input type="checkbox"/> Variance Application - Residential	\$500.00	
<input type="checkbox"/> Variance Application - Nonresidential	\$600.00	
<input type="checkbox"/> Appeal of Administrator/Interpretation Request	\$300.00	
	TOTAL	

2. Engineering Review Fees (Check all that apply):

<input type="checkbox"/> Residential Construction Plans (Water/Sewer)	\$2500.00 plus \$100 per acre	
<input type="checkbox"/> Residential Construction Plans (Roadway/Storm Water System)	\$2500.00 plus \$100 per acre	
<input type="checkbox"/> Residential Construction Plans (Storm Water Quality/Detention)	\$2000.00 plus \$100 per acre	
<input type="checkbox"/> Commercial Construction Plans (Water/Sewer)	\$2500.00 plus \$100 per acre	
<input type="checkbox"/> Commercial Construction Plans (Roadway/Storm Water System)	\$2500.00 plus \$100 per acre	
<input type="checkbox"/> Commercial Construction Plans (Storm Water Quality/Detention)	\$2000.00 plus \$100 per acre	
<input type="checkbox"/> NCDOT Utility Encroachment Application Review	\$100.00	
<input type="checkbox"/> NCDOT Driveway Permit Review	\$50.00	
<input type="checkbox"/> NCDENR-DWQ Application Review/Execution	\$100.00	
<input type="checkbox"/> NCDENR-PWS Application Review/Execution	\$100.00	
<input type="checkbox"/> Letter of Intent to Serve - Water and Sewer	\$500.00 plus water model fee	
<input type="checkbox"/> Conditional Rezoning Plan Review	\$200.00	
<input type="checkbox"/> Preliminary Plat Review	\$300.00	
<input type="checkbox"/> Annual Storm Water BMP Inspection/Certification Review	\$300.00	
<input type="checkbox"/> Grading Plan	\$500.00 plus \$100.00 per acre	
	TOTAL	

Notes:

1. Additional Engineering fees may apply. Please review the Town of Harrisburg Fee Schedule.
2. All applicable inspection fees will be due prior to the release of plans for final approval.
3. Water and sewer connection and development fees will be due prior to connection or installation of water and sewer services.
4. Town of Harrisburg encroachment fees will be due at time of encroachment installation, if applicable.
5. For final plat submittal requirements and fees, please review the final plat application and checklist.

3. Fire Review Fees (Check all that apply):

Commercial Plans or Commercial Upfit Fees Based on SF		
<input type="checkbox"/> Less than 4,999	\$200.00	
<input type="checkbox"/> 5,000 to 9,999	\$250.00	
<input type="checkbox"/> 10,000 to 24,999	\$350.00	
<input type="checkbox"/> 25,000 to 49,999	\$500.00	
<input type="checkbox"/> 50,000 or greater	\$.02 per sq. ft.	
<input type="checkbox"/> Site Review for Commercial / Subdivisions	\$200.00	
<input type="checkbox"/> Site Review for Rezoning Commercial/Subdivisions	\$200.00	
<input type="checkbox"/> Subdivision Plat/Site Plan Review	\$200.00	
	TOTAL	

Additional Requirements

Site Contact: [Jonna Stein at 704-455-4171 or jonna_stein@venatorcorp.com](mailto:jonna_stein@venatorcorp.com)



Participant Information and Acceptance of Requirements

- 4. Applicant _____
Address _____
Phone _____
Email Signature _____

- 5. Planning Staff _____
Signature _____

- 6. Engineering Staff _____
Signature _____

- 7. Fire Staff _____
Signature _____

- 8. NCDOT Staff _____
Signature _____

- 9. Other Signature _____

- 10. Date _____



Quasi-Judicial Approval Application

1. Application Type (select all that apply)

- Variance
 Floodplain Variance
 Special Use Permit
 Appeal of Administrative Decision

2. Project Information

- a. Project Name: Venator Chemicals - Onsite Industrial Landfill
- b. Project Location/Address: 5910 Pharr Mill Road 28075
- c. Tax Map and Parcel Number (PIN): 551 769 288 100 00
- d. Zoning: Existing: _____ Proposed: _____
- e. Land Use: Existing: _____ Proposed: _____
- f. Description of Request (attach separate sheet if needed):

See Attached Documents

3. Contact Information

- a. Project Manager/Contact Person: Michael Thomas, "Construction Project Manager"
 Company: Venator Chemicals LLC
 Address: 5910 Pharr Mill Road City, State, Zip: Harrisburg NC 28075
 Phone Number: 704-455-4139 Email Address: michael_thomas@venatorcorp.com
- b. Applicant Name (if different than above): Jonna Stein, "EHS Manager"
 Company: Venator Chemicals LLC
 Address: 5910 Pharr Mill Road City, State, Zip: Harrisburg NC 28075
 Phone Number: 704-455-4171 Email Address: jonna_stein@venatorcorp.com
- c. Owner Name: Kurt Odgen on behalf of Venator Chemicals LLC
 Company: Venator Chemicals LLC
 Address: 5910 Pharr Mill Road City, State, Zip: Harrisburg NC 28075
 Phone Number: _____ Email Address: _____

4. Owner's Consent

Kurt Ogden on behalf of Venator Chemicals LLC ("Owner") certifies that it is the owner of the property located at 5910 Pharr Mill Road, Harrisburg NC 28075 ("Subject Property") and expressly consents to the use of the Subject Property as described in this application and to all conditions that may be agreed to as a part of the approval of this application, which may be imposed by the decision making board.

Owner hereby authorizes, Michael Thomas as agent, to file this application and represent Owner at any and all meetings and hearings required for the approval of this application.

Owner's Signature:  Date: 22/11/2023

5. Affidavit of Completeness and Accuracy (to be completed by the individual submitting the application)

Project Name: Venator Chemical - Onsite Industrial Landfill Submittal Date: _____

STATEMENT OF COMPLETENESS AND ACCURACY:

I hereby certify all property owners have full knowledge the property they own is the subject of this application. I hereby certify the statements or information made in any paper or plans submitted herewith are true and correct to the best of my knowledge. I understand this application, related application material and all attachments become official records of the Planning and Zoning Department of Harrisburg, North Carolina, and will not be returned.

I understand that any knowingly false, inaccurate or incomplete information provided by me will result in the denial, revocation or administrative withdrawal of this application, request, approval or permit. I further acknowledge that additional information may be required to process this application. I further consent to the Town of Harrisburg to publish, copy or reproduce any copyrighted documents submitted as a part of this application for any third party. I further agree to all terms and conditions, which may be imposed as part of the approval of this application.

Applicant Name: Michael Thomas

Applicant Signature: Michael Thomas

6. Staff Use Only:

Record of Process

Date Received: 12/1/24

Application Number: _____

Is Application Complete? Yes No

Public Hearing Date(s): _____

Published Notice Date: _____

Mailed Notice Date: _____

Posted Notice Date: _____

Final Action Applicant Notification Mailed Date: _____

Town Staff Signature: _____

Record of Decision

Reviewed By: _____

Recommendation: Approve Deny

Final Action: Approve Deny

7. Required Attachments

All development application submittals must be accompanied by:

- Applicable fee(s) (see Master Fee Schedule in Appendix B of the Development Guidebook);
- Attachments listed in under the pertinent application;
- Case numbers of other related development applications; and
- Any additional information or attachments required by the Town Attorney, Director or other Town staff, Historic Preservation Commission, Planning and Zoning Board, Board of Adjustment, or Town Council.

Consult staff during pre-application meeting for any required paper copies consult staff during pre-application meeting for any required paper copies.

<p>Variance</p> <ol style="list-style-type: none"> 1. List of all abutting property owners' name, mailing address, and PINs 2. Sketch plan showing: <ol style="list-style-type: none"> a. Boundaries of property b. Size and location of all existing building(s) c. Size and location of all proposed buildings, parking facilities, and accessory structures d. Number, location, and type of any proposed screening or buffering 3. List of the UDO section(s) seeking relief from 4. Provide reasons for seeking variance 5. Explanation of how request meets the specific review criteria in UDO Section 145.04.01, <i>Variance</i> 	<p>Floodplain Variance</p> <ol style="list-style-type: none"> 1. List of all abutting property owners' name, mailing address, and PINs 2. Sketch plan showing: <ol style="list-style-type: none"> a. Boundaries of property b. Size and location of all existing building(s) c. Size and location of all proposed buildings, parking facilities, and accessory structures d. Number, location, and type of any proposed screening or buffering 3. List of the specific section(s) in UDO Chapter 143 seeking relief from 4. Provide reasons for seeking variance 5. Explanation of how request meets the specific review criteria in UDO Section 145.04.02, <i>Variance, Floodplain</i>
<p>Special Use Permit</p> <ol style="list-style-type: none"> 1. List of all abutting property owners' name, mailing address, and PINs 2. Land use of all abutting properties 3. Explanation of how request meets the specific review criteria in UDO Section 145.04.03, <i>Special Use Permit</i> 4. Sketch Plan, Traffic Impact Study, etc. if determined necessary 	<p>Appeal of Administrative Decision</p> <ol style="list-style-type: none"> 1. A written letter describing the request including applicant's interpretation of the provision(s) in question and reasons for that interpretation. Applicant may be required to prove any facts included in letter to the BOA

VENATOR

Harrisburg Planning and Zoning Department
 4100 Main Street
 Harrisburg, NC 28075

Property Location

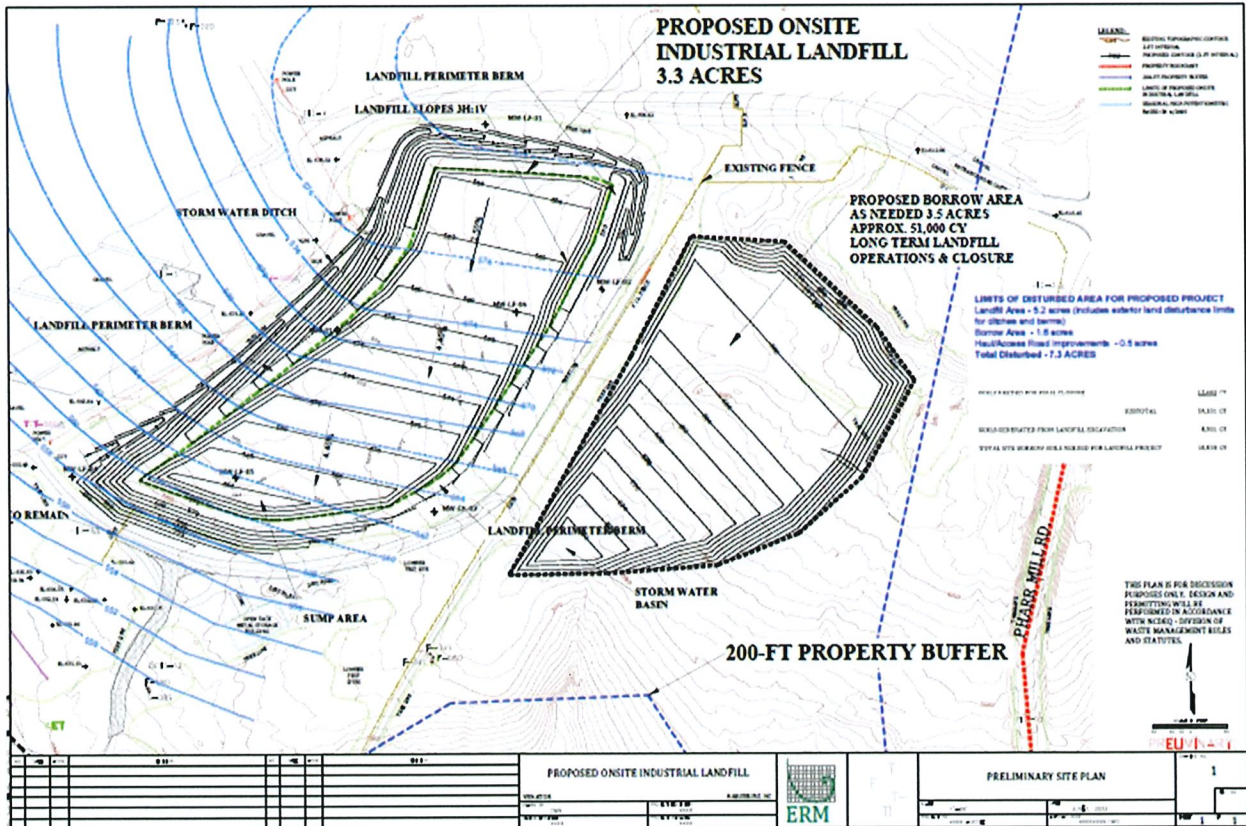
Physical Location: 5910 Pharr Mill Rd Harrisburg, NC 28075
 Parcel I.D. 55176928810000

Venator proposed landfill info:

Venator wishes to develop an onsite industrial landfill to upgrade an outdated settling lagoon by removing solids and placing them in a new nonhazardous Industrial Solid Waste Landfill (ISWL).

The proposed landfill will also serve as long-term disposal for management of process wastewater sediments. In addition, once the sediments have been removed, SWMU-5 will be re-engineered with an impermeable liner to prevent future leaching to the subsurface environment. Once completed, the re-configured SWMU 5 will continue to operate as a wastewater settling lagoon.

Venator proposed landfill



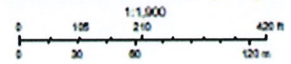
VENATOR

Heritage Tree Mitigation

Venator Heritage Trees



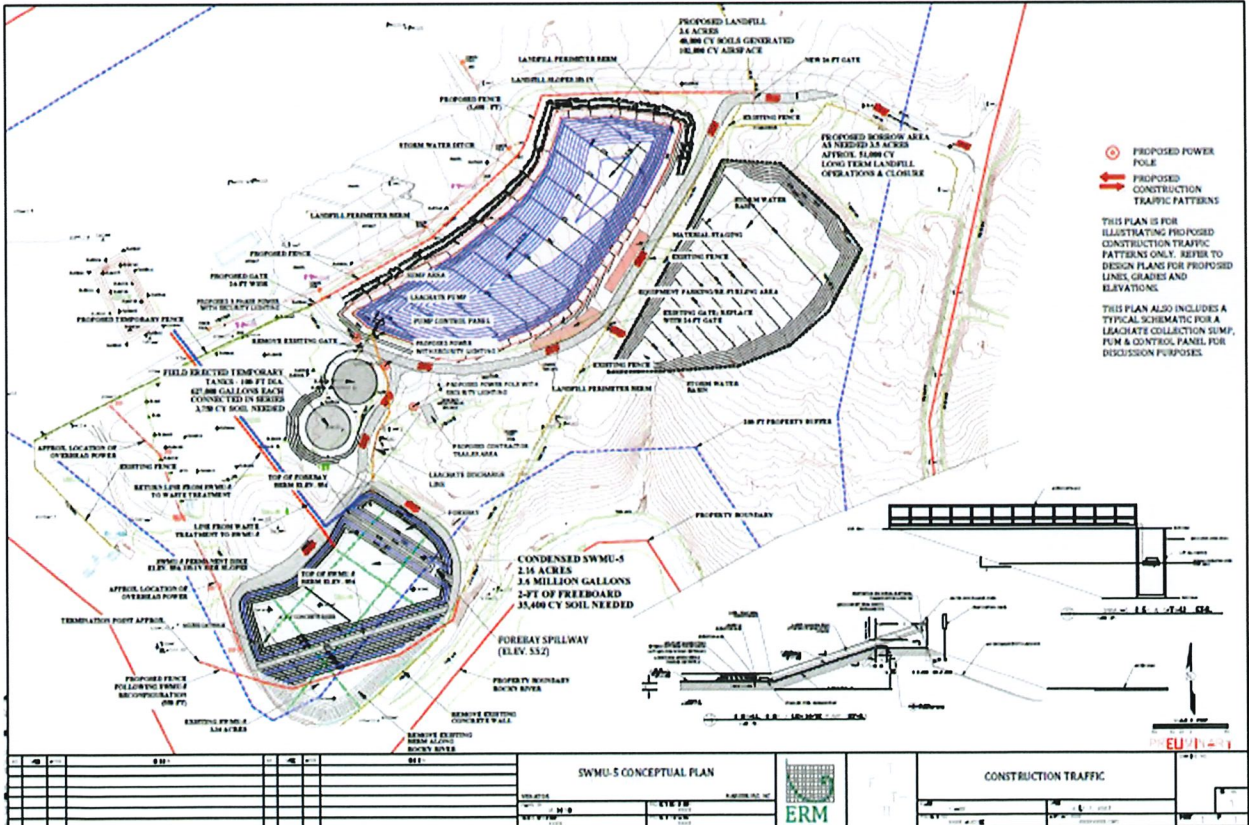
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Site Plan Construction:

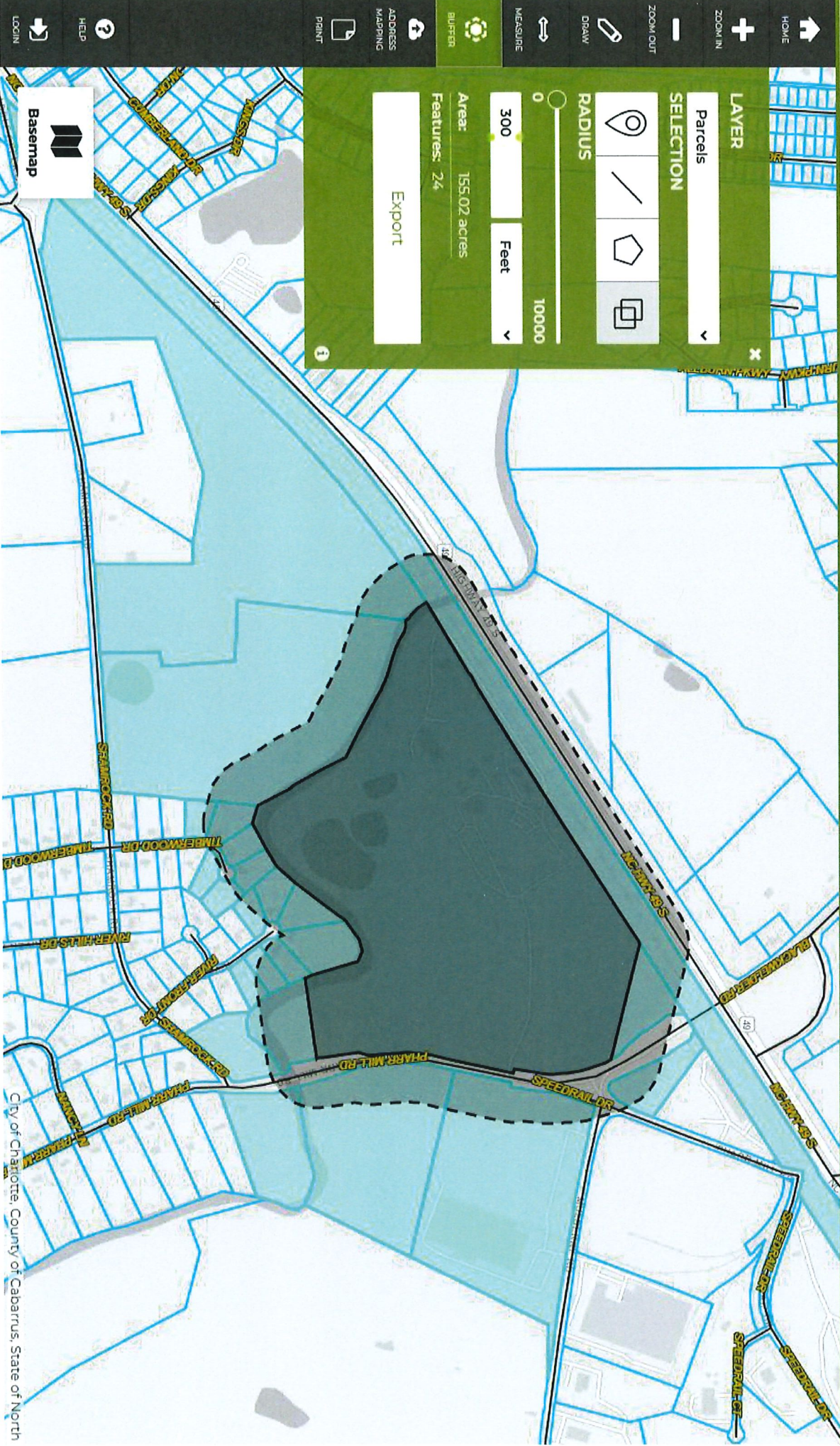


VENATOR

If you have any questions or concerns regarding this project, please contact me by email at Michael_thomas@venatorcorp.com or by phone 704-455-4139

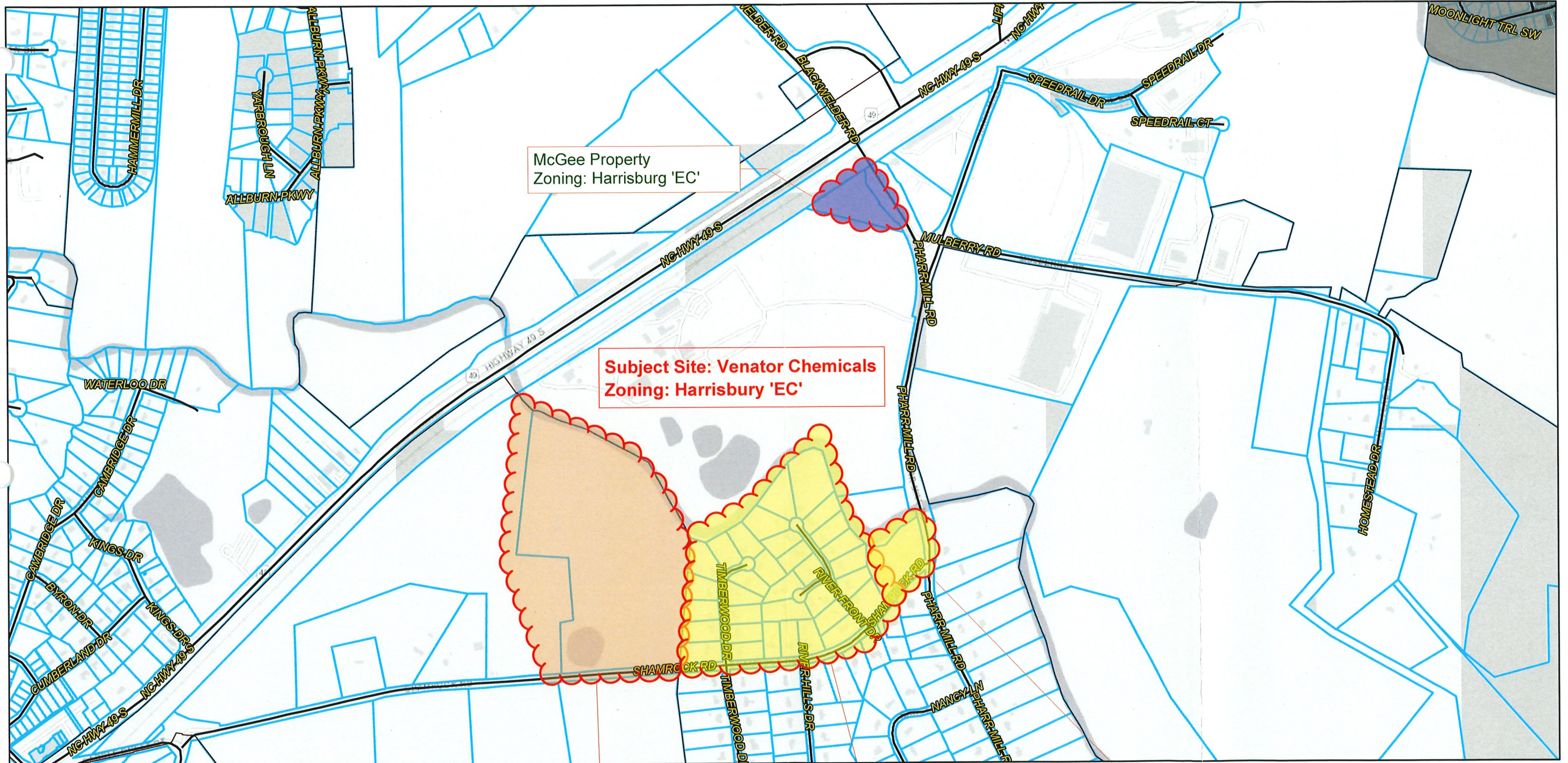
Sincerely,

Michael Thomas
Construction Project Manager
Venator Chemicals LLC



City of Charlotte, County of Cabarrus, State of North

Property/Real ID	PARCEL	LandUnits	Platbook	Platpage	ActName1	ActName2	MailAddr1	MailAddr2	MailCity	MailState	MailZipCode
01-009 -0018.17	55177886340000	6.05	00000	00000	COGBURN VICTOR B	COGBURN DARLENE H W/F	3294 N NC 16 BUSINESS HWY		DENVER	NC	28037
01-009C-0029.00	5517687670000	0.81	00000	00000	SIMPSON PHILLIP A	SIMPSON JANE BLACKLEY WIFE	6318 RIVER FRONT DRIVE		HARRISBURG	NC	28075
01-009C-0026.00	55176849110000	1.35	00029	00050	BARBEE DALE E	BARBEE CYNTHIA A W/F	6300 RIVER FRONT DR		HARRISBURG	NC	28075
01-009 -0019.10	55188010690000	29.05	00000	00000	GREIF PACKAGING LLC		C/O INDUSTRIAL VALUATION SVCS	PO BOX 92108	AUSTIN	TX	78709
01-009C-0027.00	55176869480000	2.47	00029	00050	MCURELATS LOUIS		6306 RIVER FRONT DR		HARRISBURG	NC	28075
01-009C-0030.00	55176885360000	0.77	00000	00000	CORMIER ALFRED E III	CORMIER HELEN C W/F	6324 RIVER FRONT DR		HARRISBURG	NC	28075
01-013 -0016.10	5507544310000	146.742	00071	00043	NORTH CAROLINA RAILROAD CO		ATTN DANIEL HALLOLAN	2809 HIGHWOODS BLVD STE 100	RALEIGH	NC	27604
01-010 -0006.00	551739884140000	93.8	00000	00000	TEETER LEA C	ESTATE OF TEETER LEA C	PO BOX 333		MOCKSVILLE	NC	27028
01-009C-0008.00	55176834140000	0.77	00000	00000	FARWER RICHIE L	FARWER ANITA J/WIFE	6804 TIMBERWOOD DRIVE		HARRISBURG	NC	28075
01-009C-0028.00	55176877090000	0.86	00000	00000	STARNES DONALD E JR &	WIFE SHERRY	6312 RIVER FRONT DRIVE		HARRISBURG	NC	28075
01-009C-0004.00	55175883300000	0.86	00000	00000	AMBROSIO JOSEPH J & WIFE	AMBROSIO JEAN M	6821 TIMBERWOOD DR		HARRISBURG	NC	28075
01-009C-0007.00	55176816520000	0.87	00029	00050	HIOTT BRENDA M		6805 TIMBERWOOD DR		HARRISBURG	NC	28075
01-009 -0018.00	55177817590000	3.46	00000	00000	VENATOR CHEMICALS LLC		PO BOX 1330		HARRISBURG	NC	28075
01-009C-0006.00	55176805160000	0.91	00000	00000	HELMUTH HELEN L	HELMUTH WILLARD V	6811 TIMBERWOOD DR		HARRISBURG	NC	28075
01-009C-0024.00	55176846310000	0.83	00029	00050	REEDY MITCHELL E	REEDY KELLY S W/F	6313 RIVER FRONT DR		HARRISBURG	NC	28075
01-009 -0005.10	55187140840000	3.358	00000	00050	PHARR WILL PROPERTIES LLC		6900 RIVER HILLS DR		HARRISBURG	NC	28075
01-009C-0025.00	55176837140000	1.17	00029	00050	WILKINSON KAREN ANITA		6905 RIVER FRONT DR		HARRISBURG	NC	28075
01-009 -0019.40	55177993000000	18.467	00000	00000	GREIF PACKAGING LLC		C/O INDUSTRIAL VALUATION SVCS	PO BOX 92108	AUSTIN	TX	78709
01-009C-0005.00	55175884490000	1.17	00000	00000	STRUBECK MICHAEL LOU	STRUBECK JOAHANNA C/WIFE	6817 TIMBERWOOD DRIVE		HARRISBURG	NC	28075
01-009 -0020.00	55176928810000	100.58	00000	00000	VENATOR CHEMICALS LLC		PO BOX 1330		HARRISBURG	NC	28075
01-009 -0005.30	55187092800000	4.262	00000	00000	MCGEE KENNETH ALAN	MCGEE PAMELA D W/F	1007 RIDGEWOOD DR		HARRISBURG	NC	28075
01-009C-0009.00	55176823040000	0.76	00026	00069	FRETTAG TRISTIAN	FRETTAG BROOKLYN SPOUSE	6812 TIMBERWOOD DR		HARRISBURG	NC	28075
01-010 -0006.30	55175834880000	33.25	00000	00000	TEETER PERRY LEE		1601 TRIPLETT RD		CLEVELAND	NC	27013
01-009 -0030.00	55177824300000	4.1	00000	00000	TOWN OF HARRISBURG	A NC MUNICIPAL CORP	PO BOX 100		HARRISBURG	NC	28075



April 15, 2024

— Street Network

— Municipal District

■ CITY OF CONCORD

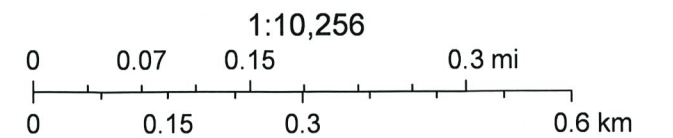
□ TOWN OF HARRISBURG

□ Parcels

Teeter Property
Zoning: Cab. County 'LDR'

River Hills Estate Subdv.
Zoning: Harrisburg 'RL'

Venator Chemicals Property
Zoning: Harrisburg 'RL'



City of Charlotte, County of Cabarrus, State of North Carolina DOT, Esri, HERE, City Of Charlotte, NC, County of Cabarrus, State of North Carolina DOT, Esri, HERE, Garmin, GeoTechnologies, Inc., Intermap, USGS, EPA

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April 8, 2024

Ms. Shelley DeHart, AICP
Assistant Planning Director
Town of Harrisburg, NC

Womble Bond Dickinson (US) LLP

555 Fayetteville Street
Suite 1100
Raleigh, NC 27601

t: 919.755.2100
f: 919.755.2150

Via E-Mail PDF Attachment

Re: Venator Chemicals, LLC | Special Use Permit

Preston M. Mitchell, AICP
Land Planner
Direct Dial: 919-755-2142
E-mail: Preston.Mitchell@wbd-us.com

Dear Ms. DeHart:

As we discussed on our phone call on March 1, 2024, we understand that the Special Use Permit criteria for approval are identified in three (3) different areas of the Harrisburg Unified Development Ordinance (“UDO”). As such, please accept this submittal of narrative responses to the decision criteria in the following sections of the UDO: 1) Special Use Standards, General Criteria (Sec. 140.04.06.D); 2) Special Use Permit, Specific Review Criteria (Sec. 145.04.03.C); and 3) the applicable Common Decision Criteria for quasi-judicial applications in Table 145.01.07-1 (Sec. 145.01.07.A).

Special Use Standards, General Criteria (Sec. 140.04.06.D)

1. *HALUP*. The proposed special use will be in harmony with the area in which it is to be located and in general conformance with the HALUP:
 - a. *While this application applies only to the proposed non-hazardous Industrial Solid Waste Landfill (“ISWL”) and associated earthworks, the overall facility is located adjacent to critical rail and highway infrastructure on a single tract of land encompassing nearly ninety (90) acres. The site has continuously operated since 1965, now enjoys the updated zoning designation of Employment Center (EC), and borders nearly four hundred (400) additional acres of EC zoning north and east of the site along the NC-49 and railroad corridors.*
 - b. *The HALUP is a Comprehensive Plan, “a policy document that conveys a future vision and the steps to achieve that vision.” The general goals and objectives of the HALUP, which were thoughtfully developed to lead the overall Plan and shape the Future Land Use Map (“FLUM”) are supported by this application through the following statements:*
 - *This application (i) supports natural resource protection, generally, and more specifically the Rocky River watershed, and (ii) further protects wildlife habitats*



and important plant communities by proactively seeking to upgrade an outdated settling lagoon by removing solids and placing them in a new *non-hazardous* ISWL. The proposal also serves as long-term disposal for management of process wastewater sediments; and finally, once the sediments have been removed, SWMU-5 (existing) will be re-engineered with an impermeable liner to prevent future leaching to the subsurface environment. The proposed ISWL is both (i) a curative measure to remove contaminated soils from one, unprotected area of the site and contain those soils within a separate, specially designed protective area of the site, and (ii) a mitigative measure, in that the protective area will be a state-of-the-art facility specifically designed for environmentally secure housing of contaminated soils to virtually eliminate off-site impacts. This curative and mitigative onsite landfill supports specific goals of the HALUP: (i) ED-1—Identify and Protect Key Employment and Industrial Locations from Other Development and (ii) ENR-1—Protect Water Quality.

- *As the FLUM designation of the site is Light Industrial – areas intended for light industrial, flex, employment-generating uses with desirable access to NC-49, the Town’s support of this application will also further support the goal of fostering economic development by continuing to support a local business (since 1965), its’ workforce, and the modernization of its’ facilities for compliance and quality of life purposes.*
- *The inclusion of the proposed use as a special use within the zoning district establishes a presumption that the use is (i) both compatible with and in harmony with the surrounding area, and (ii) in conformance with the Comprehensive Plan. See Woodhouse v. Board of Commissioners of Town of Nags Head, 299 N.C. 211 (1980) (“The inclusion of the particular use in the ordinance as one which is permitted under certain conditions, is equivalent to a legislative finding that the prescribed use is one which is in harmony with the other uses permitted in the district.”); see also American Towers, Inc. v. Town of Morrisville, 222 N.C. App. 638, 643-44 (2012) (“The inclusion of a use in a zoning district, even where a special use permit is required, establishes a prima facie case that the use conforms with the comprehensive plan.”). See also UDO, sec. 144.02.02(A) (“This UDO is intended to implement the goals, objectives, and policies of the Harrisburg Area Land Use Plan.”).*

2. *Ingress and Egress.* Adequate measures will be taken to provide ingress and egress to minimize traffic hazards and traffic congestion on the public roads:

- a. *The proposed onsite ISWL avoids short and long term impact to local traffic because there is virtually no traffic generated by the proposed use. Sediments are from onsite generated processes, only, and no waste is being brought to the site for disposal.*
- b. *The proposed onsite ISWL will eliminate the need for onsite material to pass over the road, for disposal off-site and therefore creating traffic issues. The proposed use also*



prevents trucked sediments from being transported over roads during future cleanouts.

- c. The proposed onsite ISWL will be within a controlled fenced boundary*
 - d. The proposed use will meet all applicable legal standards – whether NCDOT or Town standards – for ingress and egress*
3. *Nuisances.* The proposed use will not be noxious or offensive by reason of vibration, noise, odor, dust, smoke, or gas:
- a. Materials found within the proposed onsite ISWL do not exhibit any odor, off-gassing, or attraction of vectors*
 - b. According to internal documentation from Venator Chemicals, there are no current and no history of nuisance-related Notices of Violation or complaints from the Town of Harrisburg*
 - c. Sediment movement from lagoon to landfill is estimated to occur every 5 years and will be covered with soil and seeded after each placement*
 - d. The proposed use does not include any burning of material or any blasting of bedrock*
 - e. During construction phases – dust will be managed using water trucks*
 - f. Noise will only be generated during construction, 7am-6pm weekdays. Substantial tree buffer will be maintained for landfill and borrow pit*
4. *Orderly Development.* The establishment of the proposed use will not impede the orderly development and improvement of surrounding property for uses permitted within the zoning district:
- a. Notwithstanding properties across the railroad and NC-49 as those properties are more than 350 feet from the subject property, the establishment of the proposed onsite ISWL does not impede the orderly development and improvement of (i) the Greif Packaging properties (Cabarrus County Light Industrial, approx. 45 acres) across Pharr Mill Road, nor (ii) the Teeter property (Cabarrus County Low Density Residential, approx. 37 acres) across Rocky River. The Greif properties are directly accessed from Pharr Mill Road and the Teeter property is accessed from Shamrock Road.*
 - b. The curative and mitigative measures of the proposed onsite ISWL improve upon the conditions of the existing settling lagoon by (i) reducing the existing lagoon's size by 35% (from ~3.4-ac to ~2.2-ac) and (ii) increasing the buffer distance between the lagoon and Rocky River by approx. 150 feet. These measures improve existing conditions and will not impede the ability of the property owners within the existing*



River Hills Estate subdivision, immediately south of the subject property across Rocky River, from developing, maintaining, or improving their properties. The River Hills Estate subdivision is accessed from Shamrock Road.

5. *Health, Safety, and Welfare.* The establishment, maintenance, and operation of the proposed use will not be detrimental to or endanger the public health, safety, or general welfare:
 - a. *The proposed onsite ISWL is designed in accordance with accepted engineering practices and constructed under a quality control plan. Materials used in the construction of the landfill are subject to testing to meet design plans and specifications*
 - b. *The project improves the environment by placing sediment in a secure, lined landfill while reconfiguring the lagoon to include a liner system to protect groundwater*
 - c. *On-going groundwater monitoring: the project's proposed monitoring plan includes sampling groundwater and surface water in the vicinity of the landfill 2x per year and for 30 years following closure*
 - d. *Stormwater controls will be installed in accordance with an approved erosion and sediment control plan in order to protect surface waters for the life of the landfill*
 - e. *The overall project will be performed in accordance with a plans and specifications as approved by NCDEQ to protect general health and welfare*
 - f. *NCDEQ Division of Waste Management requires financial assurance with funds that are held in trust for the care over the life of the landfill*
 - g. *The proposed onsite ISWL is subject to inspections by state regulators*
 - h. *Venator Chemicals will have licensed landfill operators on staff*
 - i. *The operating permit is a way for neighbors to be assured that facility is being operated appropriately*
6. *Other Provisions.* The proposed use complies with all other applicable provisions of this UDO:

See below for additional narratives addressing additional criteria

Special Use Permit, Specific Review Criteria (Sec. 145.04.03.C)

1. *Ingress and Egress.* Adequate measures shall be taken to provide ingress and egress so designed as to minimize traffic hazards and to minimize traffic congestion on the public roads:



- a. *The proposed onsite ISWL avoids short and long term impact to local traffic because there is virtually no traffic generated by the proposed use. Sediments are from onsite generated processes, only, and no waste is being brought to the site for disposal.*
 - b. *The proposed onsite ISWL will eliminate the need for onsite material to pass over the road, for disposal off-site and therefore creating traffic issues. The proposed use also prevents trucked sediments from being transported over roads during future cleanouts.*
 - c. *The proposed onsite ISWL will be within a controlled fenced boundary*
 - d. *The proposed use will meet all applicable legal standards – whether NCDOT or Town standards – for ingress and egress*
 2. *Nuisances.* The proposed use shall not be noxious or offensive by reason of vibration, noise, odor, dust, smoke, or gas:
 - a. *Materials found within the proposed onsite ISWL do not exhibit any odor, off-gassing, or attraction of vectors*
 - b. *According to internal documentation from Venator Chemicals, there are no current and no history of nuisance-related Notices of Violation or complaints from the Town of Harrisburg*
 - c. *Sediment movement from lagoon to landfill is estimated to occur every 5 years and will be covered with soil and seeded after each placement*
 - d. *The proposed use does not include any burning of material or any blasting of bedrock*
 - e. *During construction phases – dust will be managed using water trucks*
 - f. *Noise will only be generated during construction, 7am-6pm weekdays. Substantial tree buffer will be maintained for landfill and borrow pit*
 3. *Orderly Development.* The establishment of the proposed use will not impede the orderly development and improvement of surrounding property for uses permitted within the zoning district:
 - a. *Notwithstanding properties across the railroad and NC-49 as those properties are more than 350 feet from the subject property, the establishment of the proposed onsite ISWL does not impede the orderly development and improvement of (i) the Greif Packaging properties (Cabarrus County Light Industrial, approx. 45 acres) across Pharr Mill Road, nor (ii) the Teeter property (Cabarrus County Low Density Residential, approx. 37 acres) across Rocky River. The Greif properties are directly accessed from Pharr Mill Road and the Teeter property is accessed from Shamrock Road.*



- b. *The curative and mitigative measures of the proposed onsite ISWL improve upon the conditions of the existing settling lagoon by (i) reducing the existing lagoon's size by 35% (from ~3.4-ac to ~2.2-ac) and (ii) increasing the buffer distance between the lagoon and Rocky River by approx. 150 feet. These measures improve existing conditions and will not impede the ability of the property owners within the existing River Hills Estate subdivision, immediately south of the subject property across Rocky River, from developing, maintaining, or improving their properties. The River Hills Estate subdivision is accessed from Shamrock Road.*

Common Decision Criteria for quasi-judicial applications in Table 145.01.07-1 (Sec. 145.01.07.A)

1. The administrative body has considered the recommendation of staff in the public meeting or hearing:

David Owens, retired Gladys Hall Coates Professor of Public Law and Government at the UNC School of Government, states in his April 13, 2022 Coates' Canons blog post entitled Advisory Board Review of Quasi-judicial Decisions, "When a quasi-judicial decision is being made...[NC]G.S. 160D-406 sets out the requirements for quasi-judicial procedures that must be followed. Importantly, the decision-making board is not making a policy choice. It is determining whether a particular application meets the standards already set out in the ordinance. A hearing before the decision-making board is required, but the sole purpose of the hearing is to gather evidence as to whether the standards are met, not to secure opinions or advice as to what would be in the best public interest."

Consequently, the applicant anticipates a staff recommendation to the Board of Adjustment identifying that the application, as submitted and considered complete for placement on the Board of Adjustment agenda, meets the applicable standards set out in the Harrisburg Unified Development Ordinance.

2. The request is consistent with applicable policies of the most recently adopted HALUP, any applicable utility plans, and adopted capital improvements plans; or, if it addresses a topic that is not contained or not fully developed in the HALUP, the request does not impair the implementation of the HALUP:

Statements addressing consistency with all applicable policies of the most recently adopted HALUP are found above on pages 1 and 2 of this letter. Additionally, the subject site is identified on Sheet 8 – Conceptual Layout of the Highway 49 Corridor Improvements Plan. This application, under no circumstances, impedes the implementation of the Highway 49 improvement plans.

3. Adequate facilities, including public or private utilities, solid waste service, roads, drainage, and other improvements are present or are planned to be provided:



As the Venator Chemicals site has operated continuously since 1965, all applicable public or private infrastructure improvements have been in place and adequately updated or maintained. This application and the proposed ISWL is both (i) a curative measure to remove contaminated soils from one, unprotected area of the site and contain those soils within a separate, specially designed protective area of the site, and (ii) a mitigative measure, in that the protective area will be a state-of-the-art facility specifically designed for environmentally secure housing of contaminated soils to virtually eliminate off-site impacts.

4. The request demonstrates compatibility with surrounding conforming and permitted land uses and structures and with the essential character of the general vicinity of design, façade treatment, setbacks, building materials, and reasonably anticipated negative impacts:

Notwithstanding any development on the north side of Highway 49, all land to the west of the subject site – across Rocky River – remains undeveloped.

Immediately south of the site, also across Rocky River, is a portion of the River Hills Estate subdivision that post-dates development of the subject site. Even so, development of the subdivision in a manner consistent with all applicable codes and policies was not impeded by the operation of the subject site. The curative and mitigative measures of the proposed onsite ISWL improve upon the conditions of the existing settling lagoon by (i) reducing the existing lagoon's size by 35% (from ~3.4-ac to ~2.2-ac) and (ii) increasing the buffer distance between the lagoon and Rocky River by approx. 150 feet. These measures improve existing conditions and will not impede the ability of the property owners within the existing River Hills Estate subdivision from developing, maintaining, or improving their properties.

Also post-dating development of the subject site, the Greif Packaging properties across Pharr Mill Road also developed in a light industrial capacity (under Cabarrus County land development provisions and processes) and enjoys the same immediate access to the Highway 49 infrastructure.

Womble Bond Dickinson (US) LLP

Preston M. Mitchell, AICP

Land Planner

cc: Michael Thelen

WBD (US) 4878-2942-2518v1

Pre-Application Conference Summary

A pre-application meeting is required prior to submitting certain land development applications to the Town of Harrisburg. This pre-application meeting summary will be filled out at the pre-application meeting or in advance, and will be used as a cover sheet for your development application. Submit to planning@harrisburgnc.org

1. General Information

Project Name: Venator Chemicals - Onsite Industrial Landfill Date: 2/5/24

Development Request Type: Rezoning Residential Non-Residential
 Other _____

Project Location/Address: 5910 Pharr Mill Road 28075

Tax Map and Parcel Number (PIN): 551 769 288 100 00

Size of Parcel (square feet or acreage): 100.58 Street Frontage (feet): 1840

Current Land Use: EC Flood Zone: N/A

Project Description: Venator wishes to develop an onsite industrial landfill

2. Type of Application Required (select all that apply)

a. Administrative Applications: Minor Site Plan Major Site Plan Floodplain Development Permit
 Administrative Adjustment Zoning Clearance Construction Plans
 Sign Permit Driveway Permit Certificate of Compliance and Occupancy
 Certificate of Nonconformity Adjustment

b. Legislative Applications: UDO Text Amendment Zoning Map Amendment (rezoning)
 Conditional Zoning Approval Certificate of Appropriateness

c. Quasi-Judicial Applications: Variance Floodplain Variance Special Use Permit
 Appeal of Administrative Decision

d. Subdivision Applications: Minor Major Preliminary Plat Final Plat

3. Site Plan Requirements

a. Will this request require a site plan? Yes No

b. Miscellaneous site plan requirements: Architectural Elevations Landscaping Plan Lighting Plan
 Flood Prevention Plan Tree Survey
 Other _____

c. Has a copy of the required application(s), including required attachments been provided and reviewed with Applicant by Staff? Yes No N/A

d. Will this request require a Traffic Impact Analysis? Yes No N/A

e. Has a copy of the TIA Procedures Manual been provided and reviewed with Applicant by Staff? Yes No N/A

3. Site Plan Requirements (cont'd.)

- f. Has the applicant been made aware that a TIA Scoping Meeting will need to take place between the applicant, the Town, NCDOT, and the Consultant, and that a Scoping Agreement will need to be signed prior to submitting an application? Yes No N/A
- e. Has a copy of the Commercial Design Standards been provided and reviewed with Applicant by Staff? Yes No N/A

4. Storm Water Requirements

- a. Is the site a development that cumulatively disturbs more than 10,000 SF or a redevelopment that cumulatively disturbs 1 acre or more? Yes No
- b. Has the Town of Harrisburg Stormwater Drainage Manual been made available to the applicant, and has staff explained the need for a Storm Water Concept Meeting? Yes No N/A

5. Fees

See Town of Harrisburg's Schedule of Fees.

6. Additional Requirements

7. Participant Information and Acceptance of Requirements

a. Applicant: Michael Thomas, "Construction Project Manager" Date: 02/05/2024
Address: 5910 Pharr Mill Road 28075 City, State, Zip: Harrisburg NC 28075
Phone Number: 704-340-5722 Email Address: michael_thomas@venatorcorp.com
Signature: MICHAEL THOMAS Digitally signed by MICHAEL THOMAS
Date: 2024.02.05 10:37:52 -05'00'

b. Planning Staff: _____
Signature: _____

c. Engineering Staff: _____
Signature: _____

d. Fire Staff: _____
Signature: _____

e. NCDOT Staff: _____
Signature: _____

f. Other Signature: _____

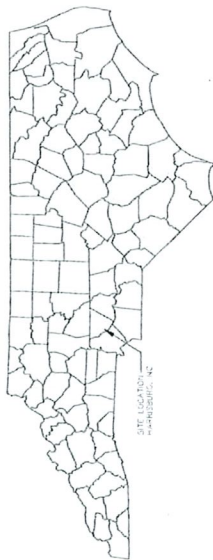
g. Date: _____

VENATOR CHEMICALS, LLC APPLICATION TO CONSTRUCT

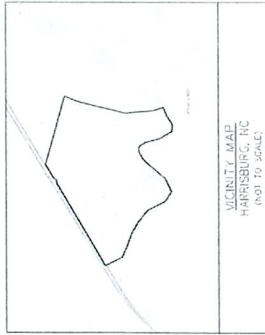
VENATOR INDUSTRIAL LANDFILL

PROJECT ID: 0646666

ENVIRONMENTAL FIRM: ENVIRONMENTAL RESOURCES MANAGEMENT INC.
HARRISBURG, NC



SITE LOCATION IN NORTH CAROLINA
(NOT TO SCALE)



VICINITY MAP
HARRISBURG, NC
(NOT TO SCALE)

GENERAL NOTES

1. BASE TOPOGRAPHIC MAPPING WAS SURVEYED BY SURVEY & MAPPING CONSULTANTS, INC. (AUGUST 2022).
2. HARRISBURG, NORTH CAROLINA, IS A CITY OF 1,000 RESIDENTS. THERE IS NO DELINEATED WETLAND ON THE PROPERTY. LIMITS OF SUGAR CREEK WERE CAPTURED IN THE PREVIOUSLY MENTIONED SURVEY.
3. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
4. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
5. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
6. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
7. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
8. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
9. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
10. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
11. THE PROPOSED INDUSTRIAL LANDFILL PROJECT IS LOCATED ON THE EAST SIDE OF SUGAR CREEK.
12. LIMITS OF WETLANDS WERE DETERMINED BY VISUAL INSPECTION AND PHOTOGRAPHY.

DWG. NO.	TITLE	REV.
1	PROJECT COVER SHEET	1
2	GENERAL NOTES SHEET 1 OF 1	1
3	EXISTING CONDITIONS	1
4	SITE DEVELOPMENT PLAN	1
5	PROPOSED PHASE 1 LANDFILL SURVEILLANCE PLAN	1
6	PROPOSED PHASE 1 LANDFILL SURVEILLANCE PLAN	1
7	PROPOSED PHASE 1 LANDFILL SURVEILLANCE COVER AND LEAKAGE COLLECTION SYSTEM	1
8	PROPOSED PHASE 1 LANDFILL SURVEILLANCE COVER AND LEAKAGE COLLECTION SYSTEM	1
9	LANDFILL LEAKAGE DETECTION PLAN	1
10	LANDFILL LEAKAGE DETECTION PLAN	1
11	LANDFILL FINAL COVER	1
12	LANDFILL DETAILS 1	1
13	LANDFILL DETAILS 2	1
14	CROSS SECTION LOCATION PLAN	1
15	CROSS SECTION 1	1
16	CROSS SECTION 2	1
17	EROSION AND SEDIMENT CONTROL PLAN - INITIAL PHASE	1
18	EROSION AND SEDIMENT CONTROL PLAN - INTERMEDIATE PHASE	1
19	EROSION AND SEDIMENT CONTROL PLAN - FINAL PHASE	1
20	EROSION AND SEDIMENT CONTROL DETAILS	1
21	EROSION AND SEDIMENT CONTROL DETAILS	1
22	EROSION AND SEDIMENT CONTROL DETAILS	1

FACILITY PLANS

DWG. NO.	TITLE	REV.
24	FACILITY PLAN - PHASE 1	1
25	FACILITY PLAN - PHASE 2	1
26	FACILITY PLAN - PHASE 3	1
27	FACILITY PLAN - PHASE 4	1
28	FACILITY PLAN - PHASE 5	1

NCDEQ STANDARD DRAWINGS

DWG. NO.	TITLE	REV.
100	GENERAL SPECIFICATION AND NOTES	1
101	PROJECT PROPOSED AND EXISTING	1

DATE	BY	APPR.	DESCRIPTION
10/27/24	DM	DM	DESIGN FOR PERMITTING - APPLICATION TO CONSTRUCT
11/16/24	DM	DM	DESIGN FOR PERMITTING - APPLICATION TO CONSTRUCT
12/10/24	DM	DM	DESIGN FOR PERMITTING - APPLICATION TO CONSTRUCT
01/24/25	DM	DM	DESIGN FOR PERMITTING - APPLICATION TO CONSTRUCT

DATE	BY	APPR.	DESCRIPTION
10/27/24	DM	DM	DESIGN FOR PERMITTING - APPLICATION TO CONSTRUCT
11/16/24	DM	DM	DESIGN FOR PERMITTING - APPLICATION TO CONSTRUCT
12/10/24	DM	DM	DESIGN FOR PERMITTING - APPLICATION TO CONSTRUCT
01/24/25	DM	DM	DESIGN FOR PERMITTING - APPLICATION TO CONSTRUCT

ENVIRONMENTAL RESOURCES MANAGEMENT INC.
HARRISBURG, NC

VENATOR INDUSTRIAL LANDFILL

VENATOR CHEMICALS, LLC

PROJECT DESIGN TO PERMITTING

PROJECT COVER SHEET

SCALE: AS SHOWN ON SHEET

DATE: AUGUST 20, 2024

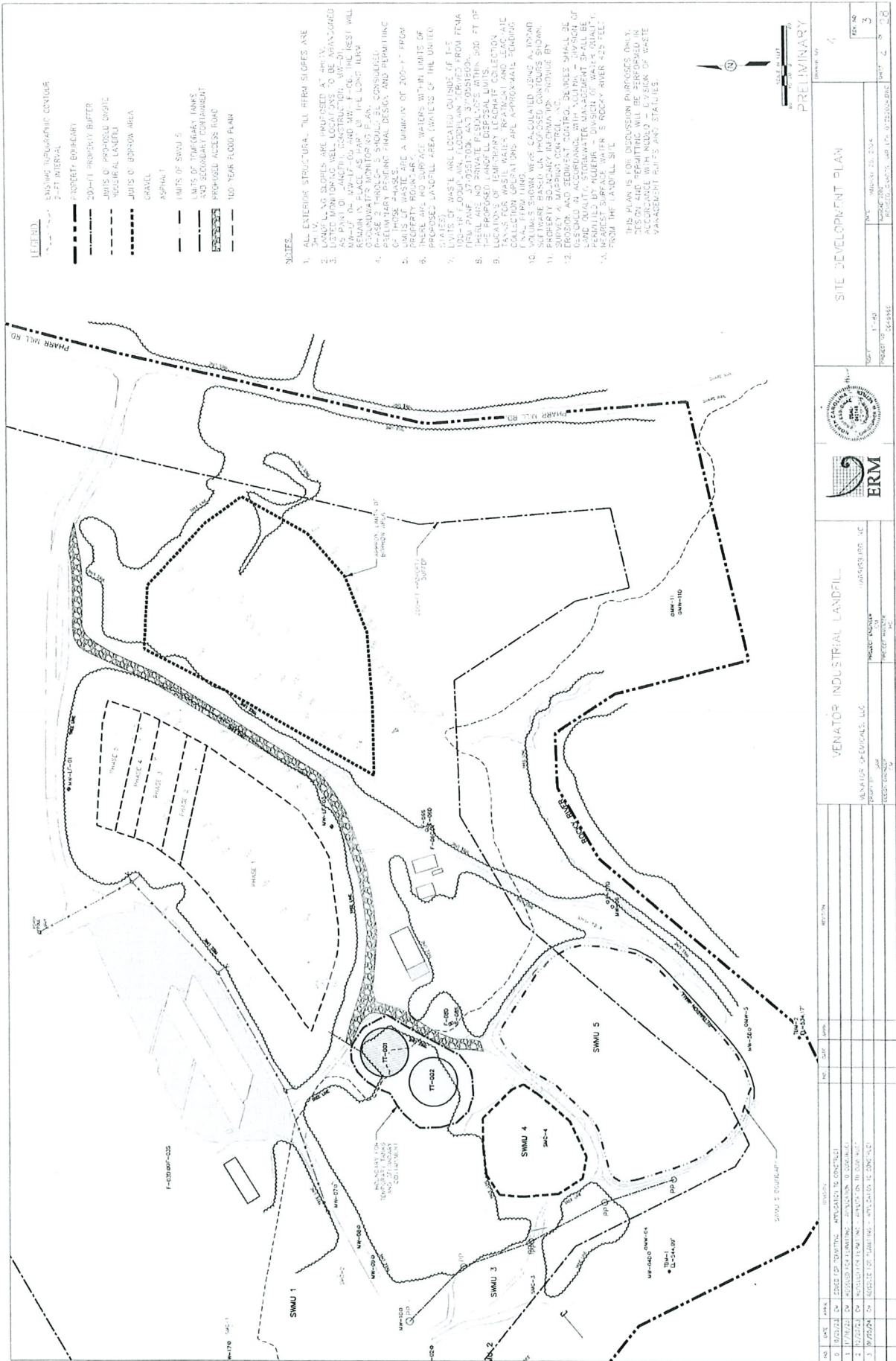
PROJECT NO: 0646666

DWG. NO: 1

SHEET NO: 3

TOTAL SHEETS: 28





LEGEND

--- EXISTING TOPOGRAPHIC CONTOUR
--- 2-FT EASEMENT

--- PROPERTY BOUNDARY

--- 20-FT PROPERTY BUFFER

--- LIMITS OF PROPOSED GRAVE

--- VERTICAL LANDFILL

--- LIMITS OF BUFFER AREA

--- ASPHALT

--- LIMITS OF SIMU 5

--- LIMITS OF TEMPORARY TANKS AND SECONDARY TREATMENT

--- PROPOSED ACCESS ROAD

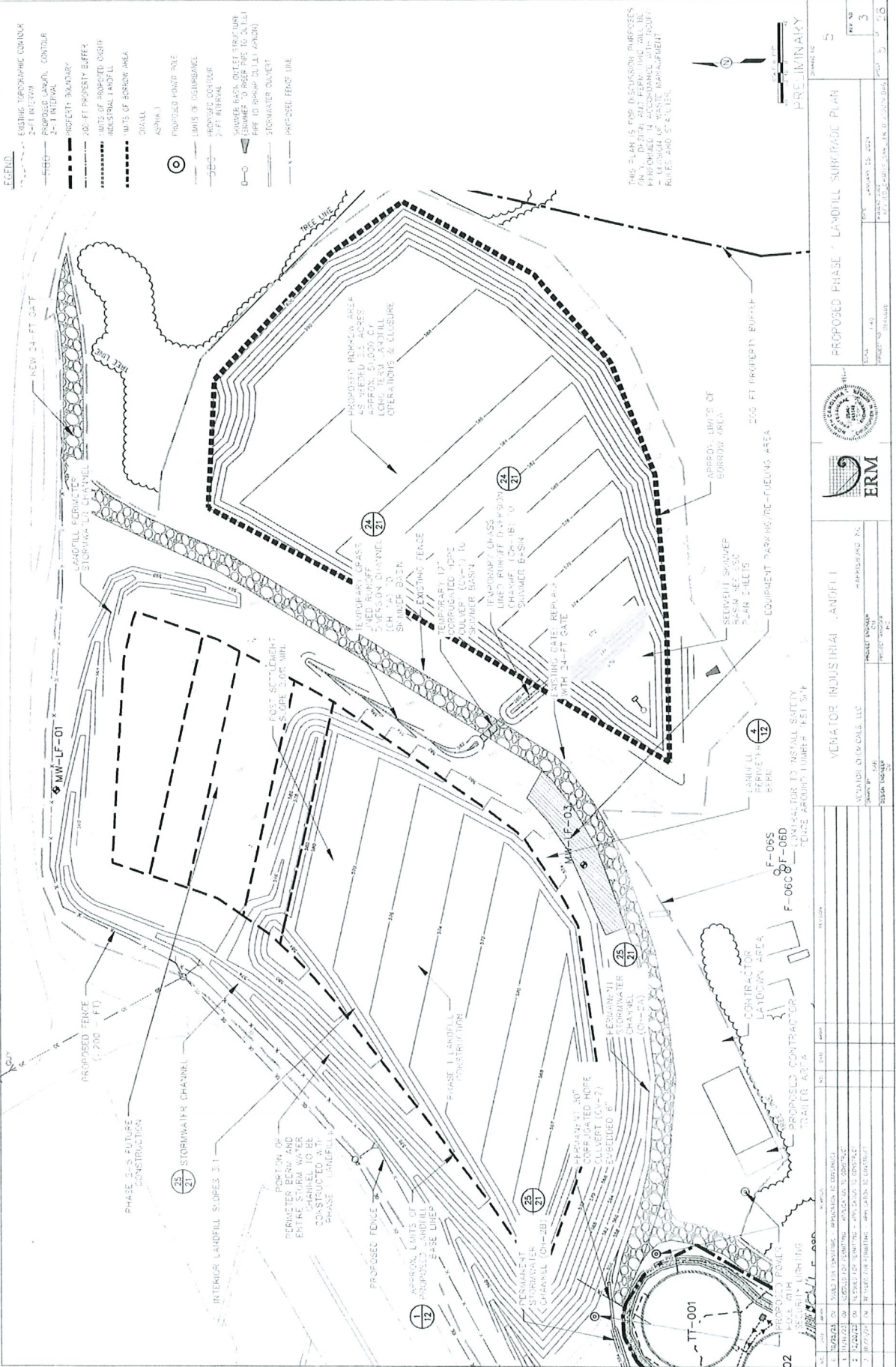
--- 100-YEAR FLOOD PLAIN

NOTES:

1. ALL EXTERIOR STRUCTURAL TLL FROM SLOPES ARE 3:1 (V:H).
2. LIMITS OF SLOPES ARE UNLESS OTHERWISE NOTED.
3. ALL EXTERIOR STRUCTURAL TLL LOCATIONS TO BE MANICURED AS PART OF FINISHING CONSTRUCTION. MANICURE SHALL BE 10'-0" WIDE AND 10'-0" HIGH. THE REST WILL REMAIN IN PLACE AS PART OF THE LANDFILL.
4. PHASE 2 THROUGH 5 SHOULD BE CONSIDERED PRELIMINARY PENDING FINAL DESIGN AND PERMITTING.
5. ALL PHASES SHOULD BE A MINIMUM OF 200'-0" FROM PROPERTY BOUNDARY.
6. THERE ARE NO SURFACE WATERS WITHIN LIMITS OF PROPOSED LANDFILL AREA (LIMITS OF THE UNITED STATES).
7. LIMITS OF WASTE ARE LOCATED OUTSIDE OF THE 100-YR FLOODPLAIN. FLOODPLAIN DERIVED FROM FEMA FIRM PANEL 37055100K AND 37055100L.
8. THE LANDFILL SHALL BE CONSIDERED A HAZARDOUS WASTE TREATMENT AND STORAGE UNIT (TSU) UNDER FEDERAL AND STATE REGULATIONS.
9. LOCATIONS OF TEMPORARY LEACHATE COLLECTION TANKS FOR WASTE WATER TREATMENT AND LEACHATE COLLECTION OPERATIONS ARE APPROXIMATE. TANKING VOLUMES SHOWN WERE CALCULATED USING A 10% FILL FACTOR AND PROPOSED CONTOURS SHOWN.
10. ALL TANKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS AND PERMITS.
11. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS AND PERMITS.
12. ALL TANKS SHALL BE CONSTRUCTED ON A DIVISION OF LAND HAVING A MINIMUM OF 1% SLOPE TO THE NEAREST SURFACE WATER. SURFACE WATER IS ROCKY RIVER 425 FEET FROM THE LANDFILL SITE.

THIS PLAN IS FOR DISCUSSION PURPOSES ONLY. DESIGN AND PERMITTING WILL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS AND PERMITS AND STANDARDS.

VENATOR INDUSTRIAL LANDFILL		4	
VENATOR OPERATIONALS, LLC		PRELIMINARY	
DATE: 11-14-20	PROJECT NO: 2019-005	SCALE: 1" = 100'	DATE: 11-14-20
PROJECT NO: 2019-005	PROJECT NO: 2019-005	PROJECT NO: 2019-005	PROJECT NO: 2019-005



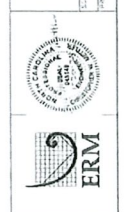
LEGEND

- EXISTING TOPOGRAPHIC CONTOUR
- 2-FT INTERVAL
- PROPOSED LAND CONTOUR
- 2-FT INTERVAL
- PROPERTY BOUNDARY
- 100-FT PROPERTY BUFFER
- LIMITS OF PROPOSED BORROW
- INDUSTRIAL LANDFILL
- LIMITS OF BORROW AREA
- GRAVEL
- ASPHALT
- PROPOSED POWER POLE
- LIMITS OF DISTURBANCE
- BURIED POWER CONDUIT
- 7-FT RITURNAL
- SHOWER BASIN (NOT TO SCALE)
- STORMWATER COLLECTOR
- PROPOSED FENCE LINE

THIS PLAN IS FOR DISCUSSION PURPOSES ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS AND ALL APPLICABLE RULES AND STATUTES.

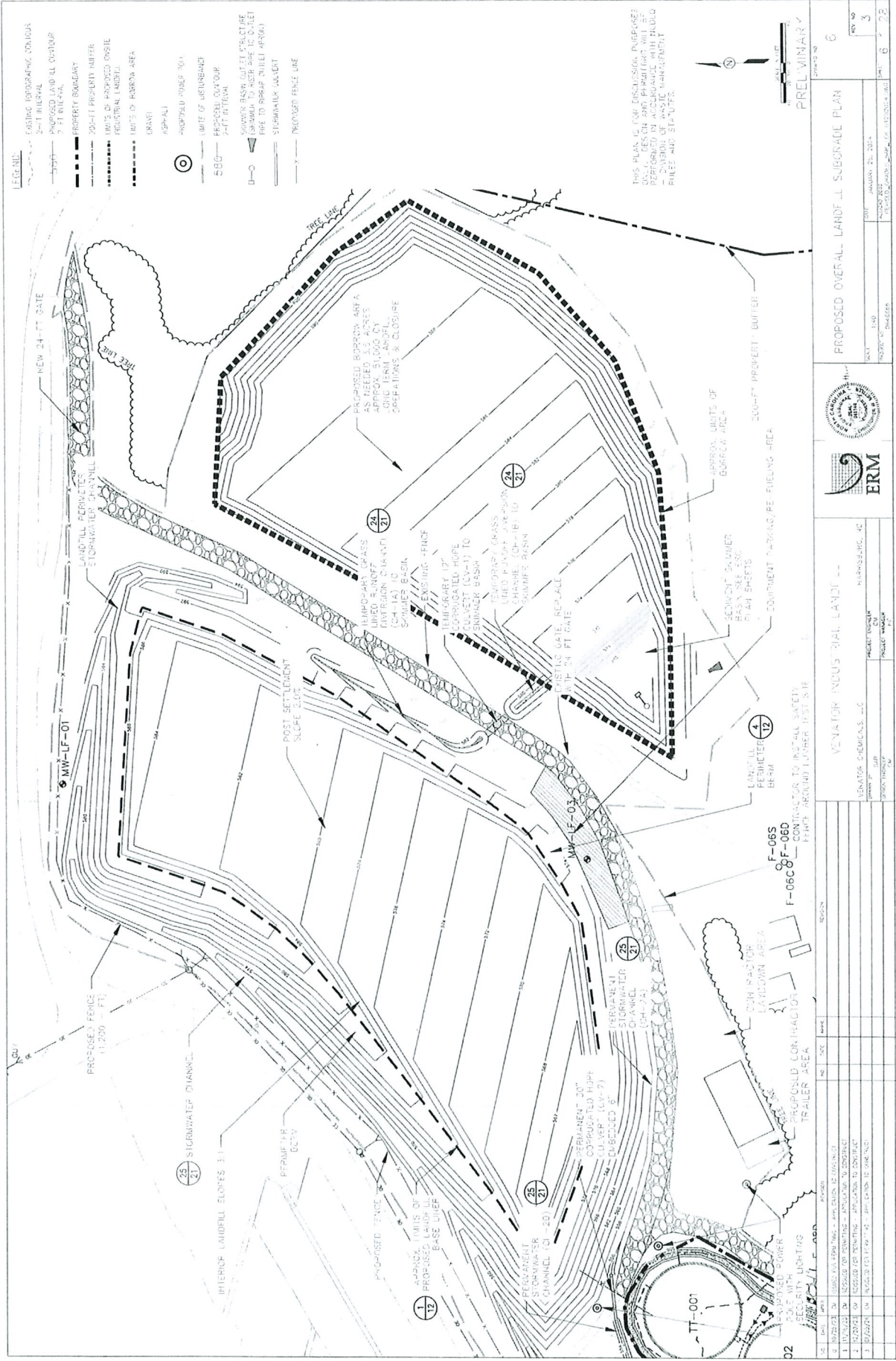
DATE: 01/25/2024
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT NO: [Number]
 SHEET NO: 3 OF 3
 SCALE: AS SHOWN

PROPOSED PHASE I LANDFILL SUBGRADE PLAN
 PRELIMINARY
 5



VENATOR INDUSTRIAL LANDFILL
 VENATOR OTEC O&S, LLC
 PROJECT NUMBER: [Number]
 SHEET NO: [Number]
 DATE: [Date]

NO.	DATE	DESCRIPTION
1	01/25/24	ISSUED FOR PERMITTING - PRELIMINARY
2	01/25/24	ISSUED FOR PERMITTING - PRELIMINARY
3	01/25/24	ISSUED FOR PERMITTING - PRELIMINARY



- LEGEND**
- EXISTING TOPOGRAPHIC CONTOUR
 - 2'-1" INTERVAL
 - PROPOSED LAND-ALL OUTLINE
 - 7' INTERVAL
 - PROPERTY BOUNDARY
 - 20'-0" PROPERTY WIDTH
 - WAYS AS ASSIGNED ORIGIN
 - INDUSTRIAL LAND USE
 - WAYS OF RIGHTS AREA
 - (GRAVEL)
 - (ASPHALT)
 - PROPOSED ROAD 70'
 - LIMIT OF UTILITY
 - PROPOSED OUTLINE
 - 24" FITTING
 - SHOWING BASH OUT STRUCTURE (DIMENSION TO CENTER LINE TO OUTLET PIPE TO SHARP TURN OFF)
 - STORMWATER COLLECTOR
 - PROPOSED FENCE LINE

THIS PLAN IS FOR DISCUSSION PURPOSES ONLY. IT IS NOT A CONTRACT DOCUMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDITIONS OF THE SITE AND FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.



PROPOSED OVERALL LAND-ALL SUBGRADE PLAN

DATE: JANUARY 25, 2024

PROJECT NO: 24-001

SHEET NO: 6 OF 25



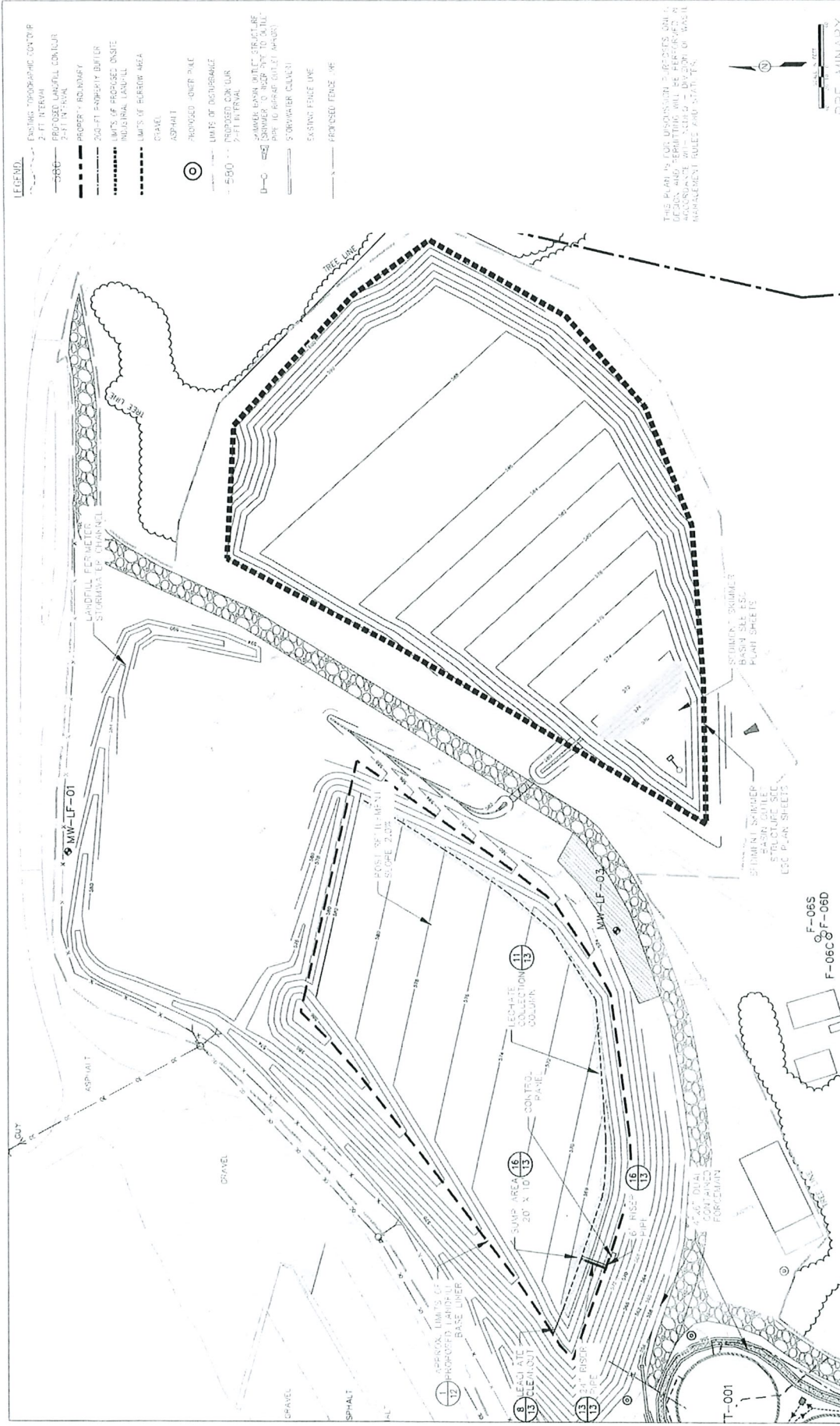
VENATOR INDUSTRIAL LAND

VENATOR CHEMICALS, LLC | HENNINGDALE, GA

PROJECT NO: 24-001

PROJECT NO: 24-001

NO.	DATE	BY	REVISION
1	10/22/23	SS	ISSUED FOR PERMITS
2	12/20/23	SS	ISSUED FOR PERMITS - AMENDMENTS TO CONTRACT
3	12/20/23	SS	ISSUED FOR PERMITS - AMENDMENTS TO CONTRACT
4	02/26/24	SS	ISSUED FOR PERMITS - AMENDMENTS TO CONTRACT



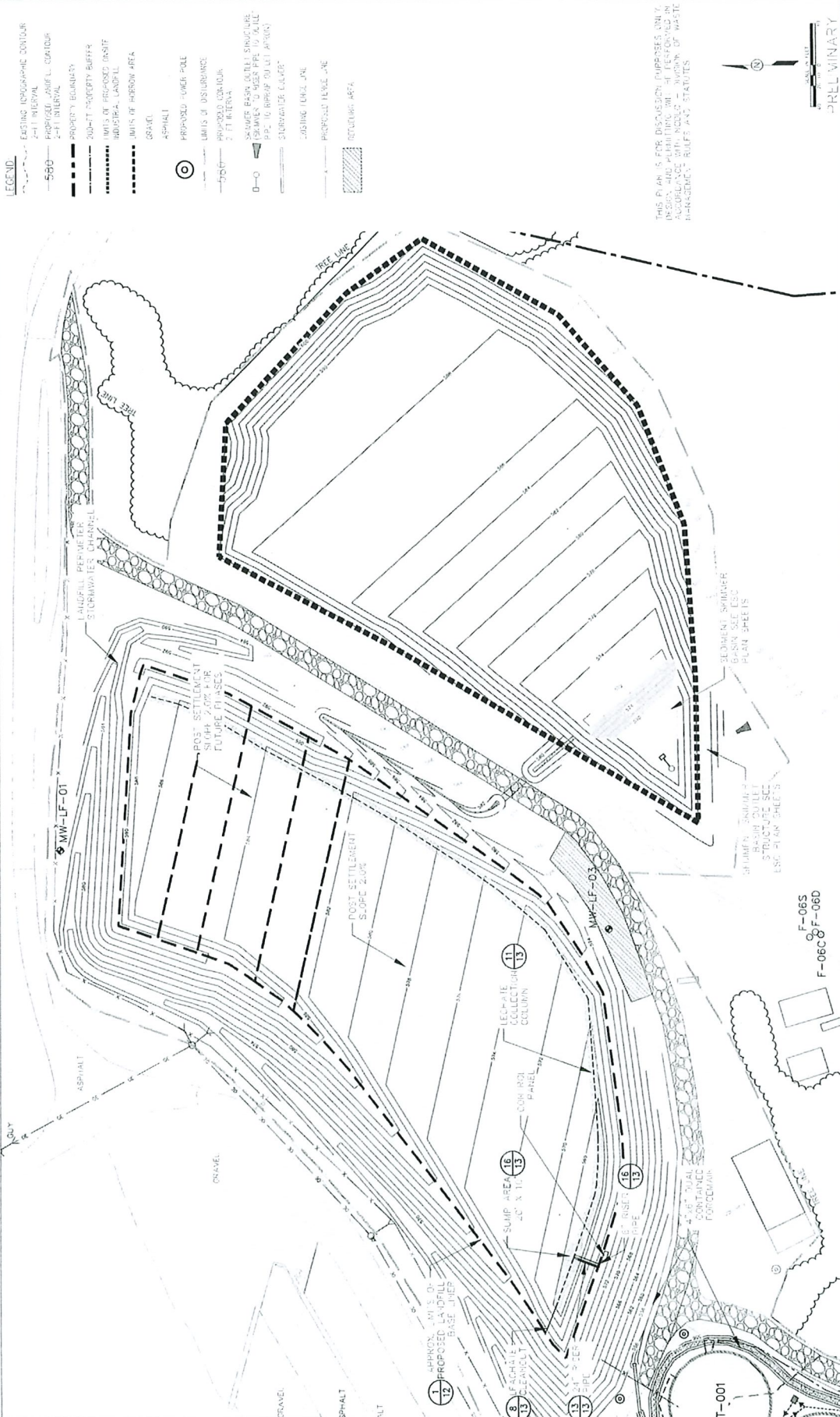
- LEGEND**
- EXISTING TOPOGRAPHIC CONTOUR
 - 2-FT INTERVAL
 - PROPOSED LANDFILL CONTOUR
 - 2-FT INTERVAL
 - PROPERTY BOUNDARY
 - 50-FT PROPERTY BUFFER
 - LIMITS OF PROPOSED ON-SITE INDUSTRIAL LANDFILL
 - LIMITS OF BUFFER AREA
 - GRAVEL
 - ASPHALT
 - PROPOSED -ONSET PALE
 - LIMITS OF DISTURBANCE
 - PROPOSED CON CUR
 - 2-FT INTERVAL
 - 590
 - SHOWER TO WASH 2" TO 3/4" DIA. TO REAR OF (1.5) (1.5) (1.5)
 - 2" OVERWATER CLEAN
 - EXISTING FORCE DYE
 - PROPOSED FENCE LINE

THIS PLAN IS FOR DISCUSSION PURPOSES ONLY. DESIGN AND REVISIONS WILL BE PERFORMED IN ACCORDANCE WITH THE SLOTTED DESIGN OF WALL MANAGEMENT RULE AND STATE LAW.



VFNATOR INDUSTRIAL LANDFILL		PROPOSED P-45: 1 LANDFILL PROTECTIVE COVER / LEACHATE COLLECTION SYSTEM	
NEW YORK CHEMICAL, LLC		SHEET NO. 7	
PROJECT NO. 17-10		DATE: 11/11/10	
PROJECT MANAGER:		DRAWN BY:	
CHECKED BY:		SCALE:	
PROJECT NUMBER:		SHEET NO. 7	
DATE:		SHEET NO. 7	
PROJECT NO. 17-10		SHEET NO. 7	
PROJECT NO. 17-10		SHEET NO. 7	

F-065
F-06C
F-06D

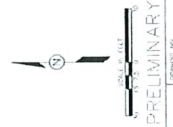


VENATOR INDUSTRIAL LANDFILL		PROPOSED OVERHAUL LOW-LEVEL PROTECTIVE COVER / LEACHATE COLLECTION SYSTEM	
DATE: 12-15-2017	SCALE: 1"=40'	DATE: JANUARY 25, 2017	SCALE: 1"=40'
PROJECT NO: 17-002	PROJECT NAME: VENATOR INDUSTRIAL LANDFILL	PROJECT NO: 17-002	PROJECT NAME: VENATOR INDUSTRIAL LANDFILL
DRAWN BY: [Name]	CHECKED BY: [Name]	DRAWN BY: [Name]	CHECKED BY: [Name]
DATE: [Date]	DATE: [Date]	DATE: [Date]	DATE: [Date]
NO.	DATE	BY	REVISION
1	12/15/17	[Name]	ISSUE FOR PERMITTING
2	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
3	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
4	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
5	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
6	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
7	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
8	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
9	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
10	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
11	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
12	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
13	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
14	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
15	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
16	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
17	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
18	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
19	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
20	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
21	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
22	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
23	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
24	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
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35	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
36	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
37	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
38	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
39	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
40	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
41	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
42	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
43	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
44	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
45	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
46	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
47	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
48	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
49	12/15/17	[Name]	ISSUE FOR CONSTRUCTION
50	12/15/17	[Name]	ISSUE FOR CONSTRUCTION

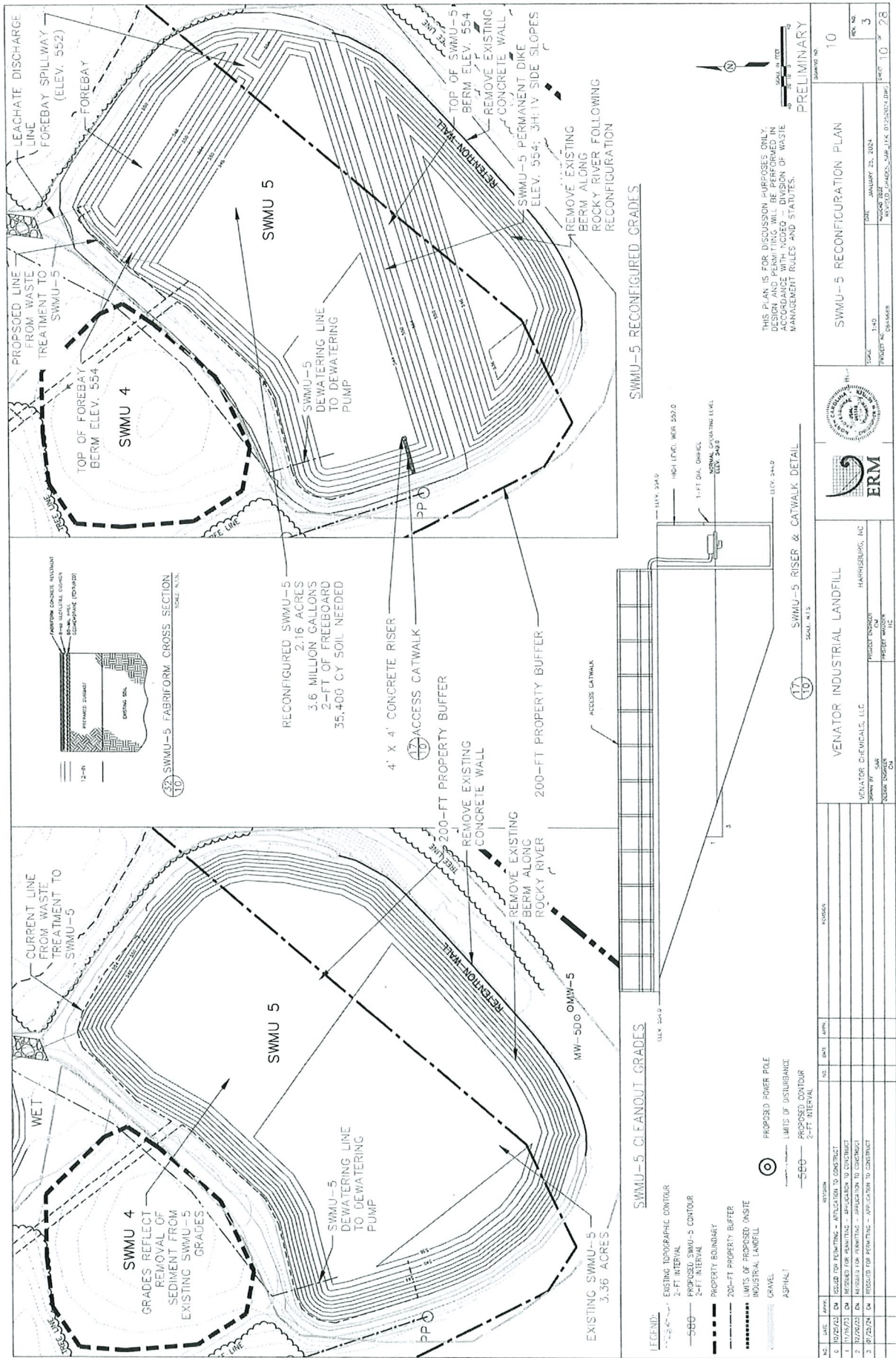


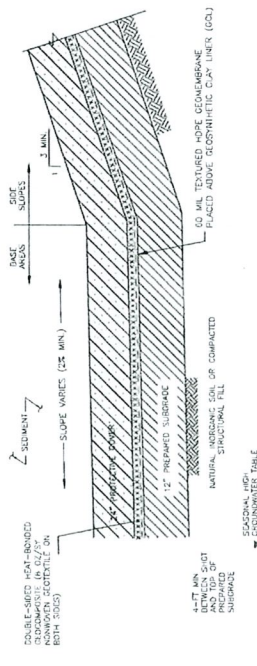
- LEGEND**
- EXISTING TOPOGRAPHIC CONTOUR
 - 2'-1" INTERVAL
 - PROPOSED LANDFILL CONTOUR
 - 5'-0" INTERVAL
 - PROPERTY BOUNDARY
 - 300-FT PROPERTY BUFFER
 - UNITS OF PROPOSED ONSITE INDUSTRIAL LANDFILL
 - UNITS OF EXISTING AREA
 - GRADE
 - NSW-41
 - PROPOSED POWER PILE
 - UNITS OF DISTURBANCE
 - PROPOSED CONTOUR
 - 2'-1" INTERVAL
 - SHOWER BASK OUTLET STRUCTURE (NUMBER TO BASK PIPE TO OUTLET PIPE TO SHOWER BASK (A-100))
 - 5" DRAINAGE COLLECT
 - SEWAGE CHAIN
 - SHOWER BASK OUTLET (A-100)

THIS PLAN IS FOR DISCUSSION PURPOSES ONLY. DESIGN AND PERMITTING WILL BE THE RESPONSIBILITY OF THE CLIENT AND WILL BE SUBJECT TO ALL APPLICABLE REGULATORY AGENCIES AND STATE AND FEDERAL MANAGEMENT RULES AND STATUTES.

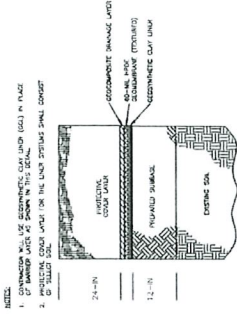


VENATOR INDUSTRIAL LANDFILL VENATOR INDUSTRIAL, LLC 10000 W. WALKER ROCKVILLE, MD 20850		LANDFILL LEACHATE PIPING 9 PRELIMINARY	
DATE: 11/22/24	BY: [Signature]	DATE: MAY 25, 2024	BY: [Signature]
NO. 1	DESCRIPTION: INITIAL DESIGN	NO. 2	DESCRIPTION: REVISIONS
3	DESCRIPTION: PERMITTING - APPROVAL TO CONSTRUCT	NO. 3	DESCRIPTION: PERMITTING - APPROVAL TO CONSTRUCT
4	DESCRIPTION: PERMITTING - APPROVAL TO CONSTRUCT	NO. 4	DESCRIPTION: PERMITTING - APPROVAL TO CONSTRUCT
5	DESCRIPTION: PERMITTING - APPROVAL TO CONSTRUCT	NO. 5	DESCRIPTION: PERMITTING - APPROVAL TO CONSTRUCT

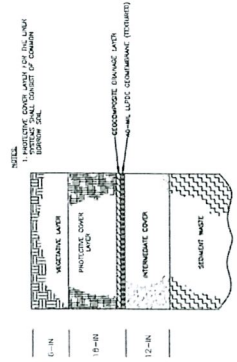




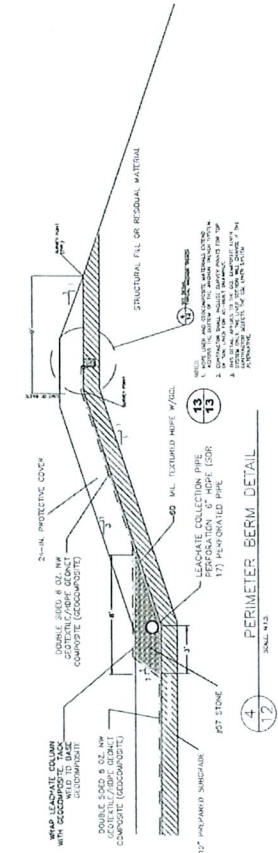
1 BASE LINER INSTALLATION DETAIL
SCALE: N.T.S.



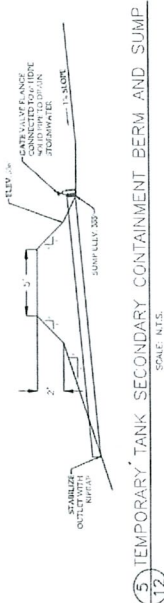
2 TYPICAL LINER SYSTEM DETAIL
SCALE: N.T.S.



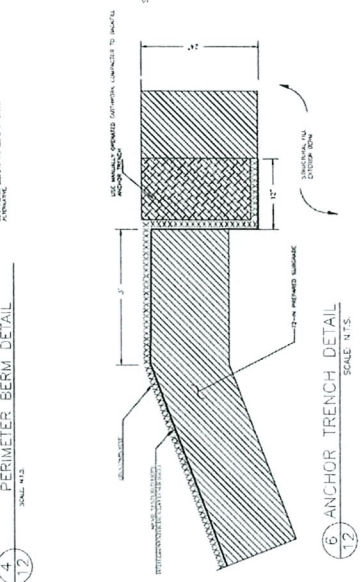
3 FINAL COVER SYSTEM DETAIL
SCALE: N.T.S.



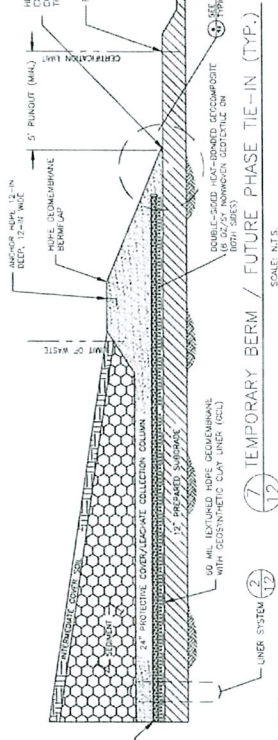
4 PERIMETER BERM DETAIL
SCALE: N.T.S.



5 TEMPORARY TANK SECONDARY CONTAINMENT BERM AND SUMP
SCALE: N.T.S.



6 ANCHOR TRENCH DETAIL
SCALE: N.T.S.



7 TEMPORARY BERM / FUTURE PHASE TIE-IN (TYP.)
SCALE: N.T.S.

NOTES:
1. UPON COMPLETION OF ALL CELL CONSTRUCTION, THE PERIMETER BERM SHALL BE REMOVED. THE EXISTING BERM SHALL BE RECONSTRUCTED BY OVERLAYING A MINIMUM OF 12\"/>

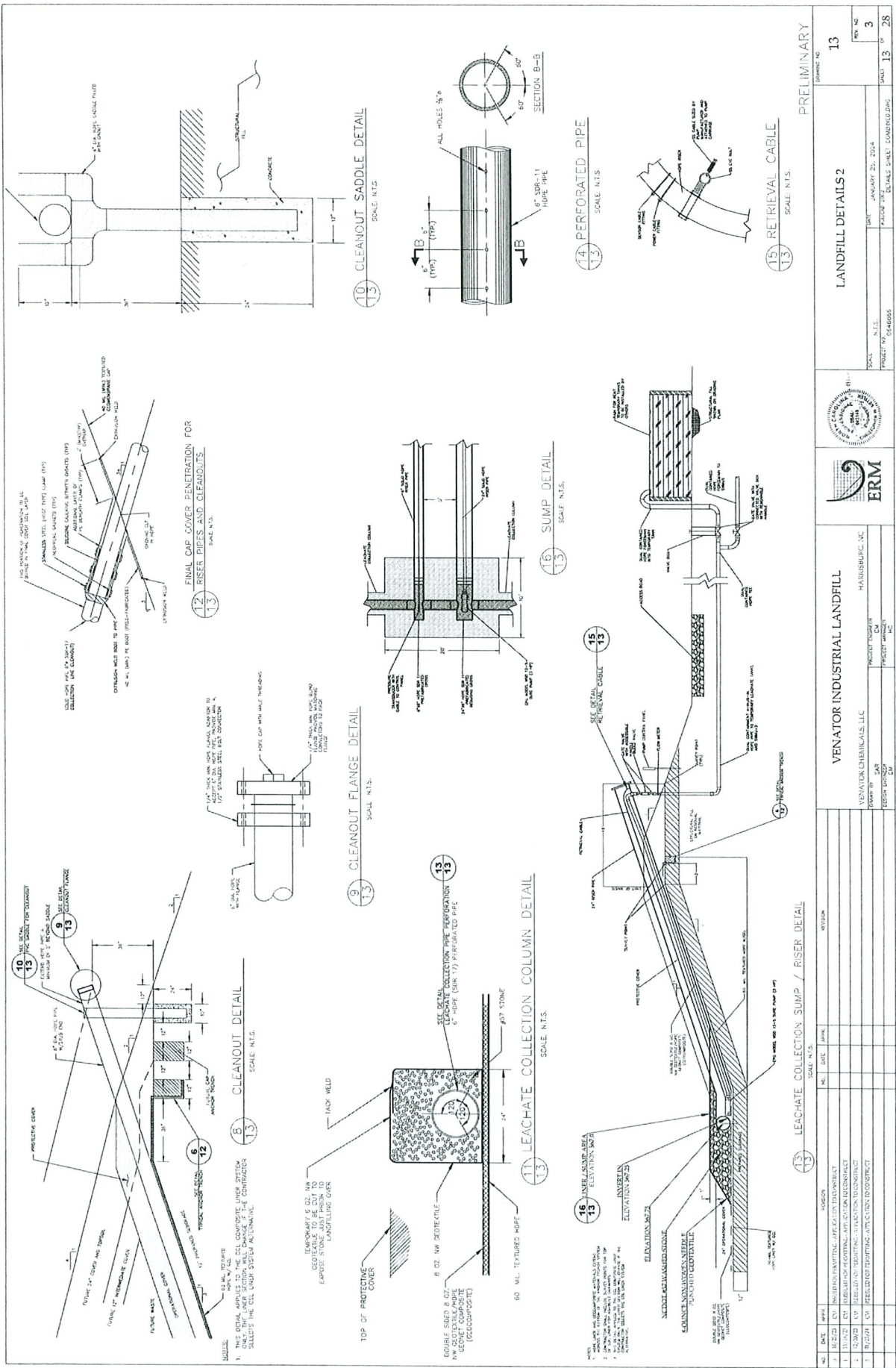
NO.	DATE	BY	CHKD	REVISION
1	10/20/23	CD	CD	ISSUED FOR PERMITS
2	10/26/23	CD	CD	REVISED PER PERMITS
3	10/26/23	CD	CD	REVISED PER PERMITS
4	10/26/23	CD	CD	REVISED PER PERMITS

VENATOR INDUSTRIAL LANDFILL
VENATOR CHEMICALS, LLC
HARRISBURG, PA
PROJECT NO. 23-0001
SHEET NO. 28



LANDFILL DETAILS 1
DATE: JANUARY 25, 2024
SCALE: N.T.S.
PROJECT NO. 23-0001
SHEET NO. 28

PRELIMINARY
EMBRIT NO. 12

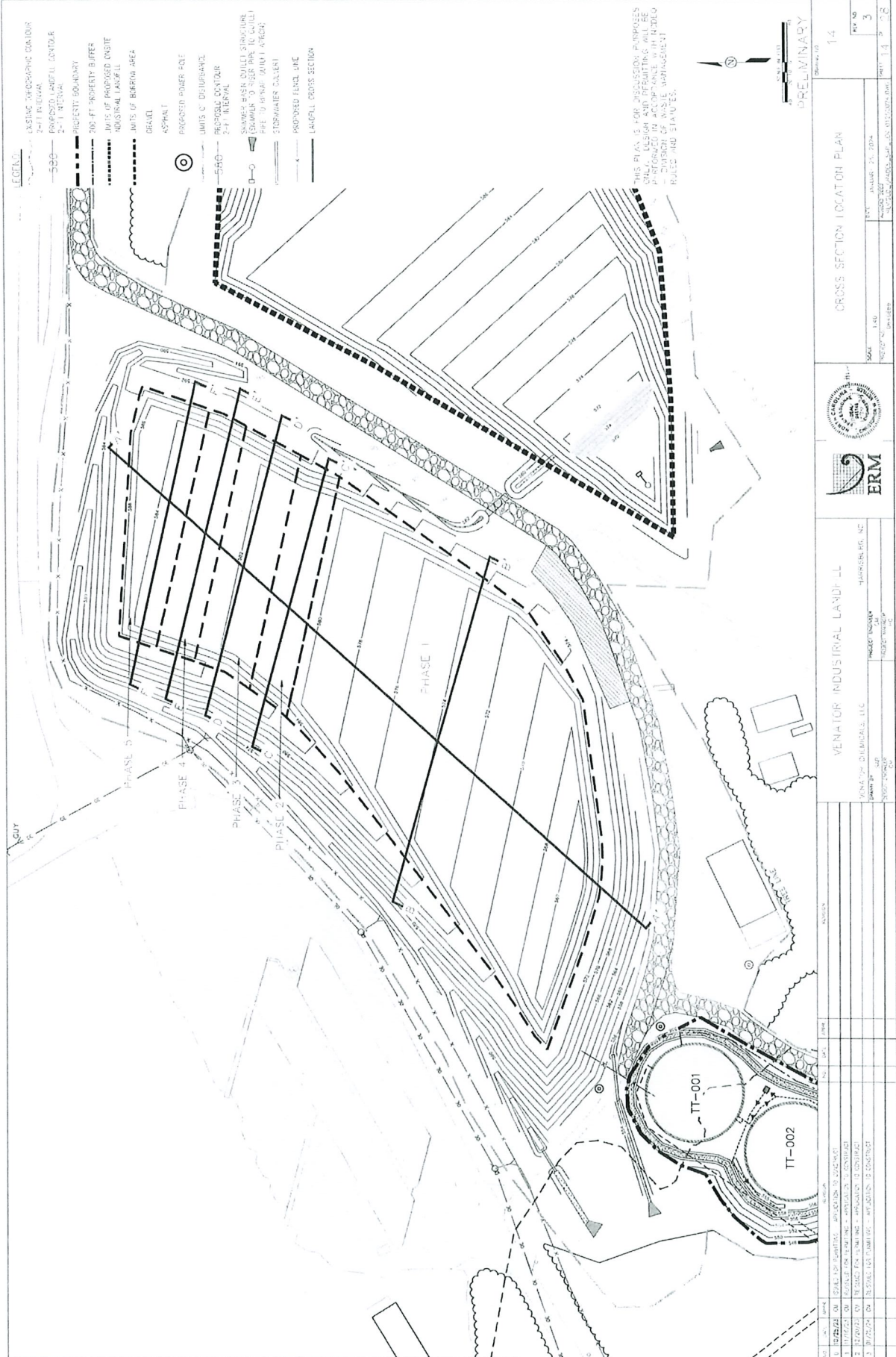


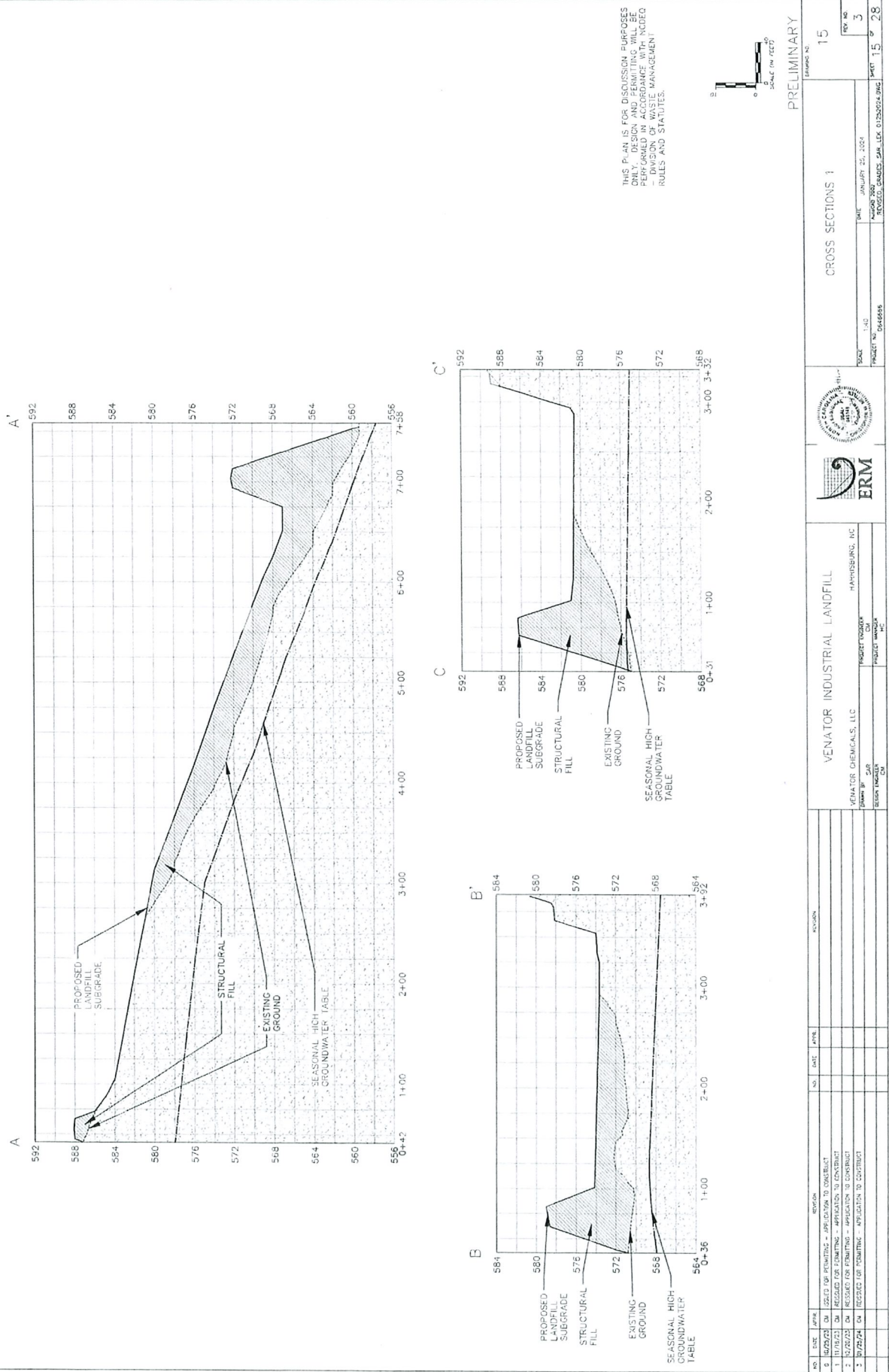
NO.	DATE	APP'D.	REV.	DESCRIPTION	REVISION
1	10/27/20	ENR	1	ISSUED FOR PERMITTING AND CONSTRUCTION	
2	12/21/20	ENR	1	ISSUED FOR PERMITTING AND CONSTRUCTION	
3	12/21/20	ENR	1	ISSUED FOR PERMITTING AND CONSTRUCTION	
4	12/21/20	ENR	1	ISSUED FOR PERMITTING AND CONSTRUCTION	

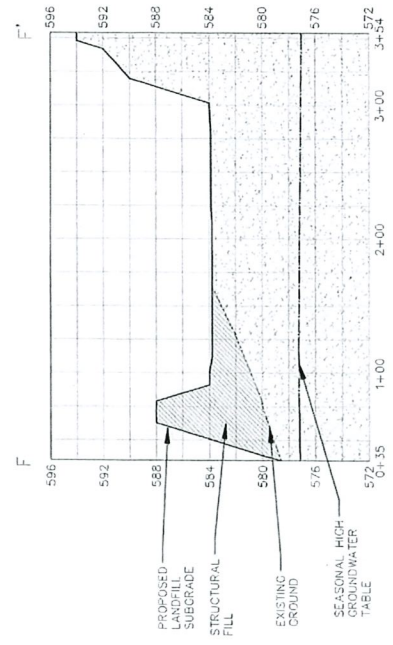
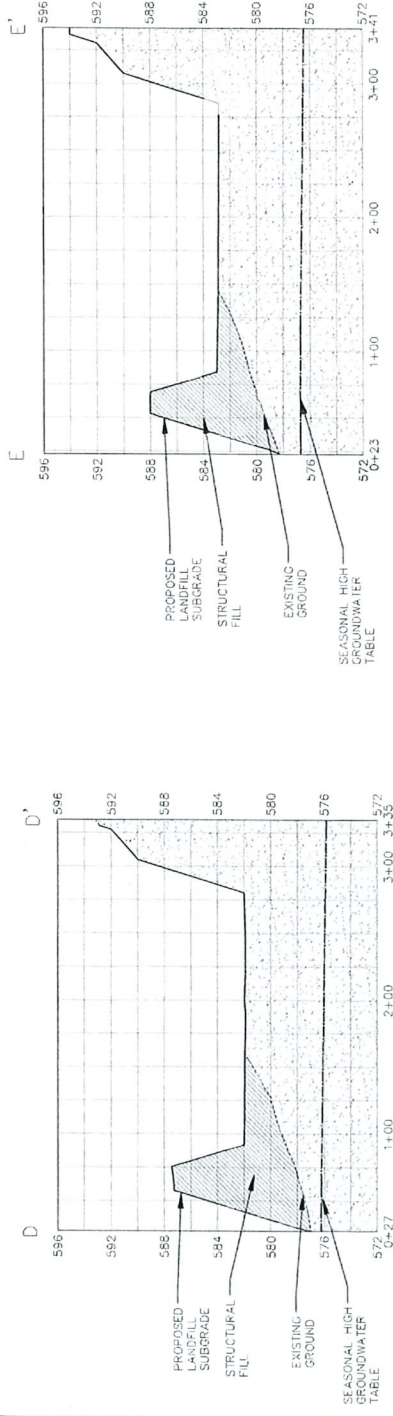
VENATOR INDUSTRIAL LANDFILL
VENATOR CHEMICALS, LLC
PROJECT NO. 19-001
SHEET NO. 28

SCALE: N.T.S.
DATE: JANUARY 23, 2024
PROJECT NO. 19-001

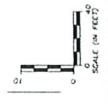
PRELIMINARY
DRAWING NO. 13







THIS PLAN IS FOR DISCUSSION PURPOSES ONLY. DESIGN AND PERMITTING WILL BE PERFORMED BY THE CLIENT WITH INDUSTRY PROFESSIONALS. CONSULT WITH LOCAL, STATE, AND FEDERAL AGENCIES FOR REGULATORY RULES AND STATUTES.

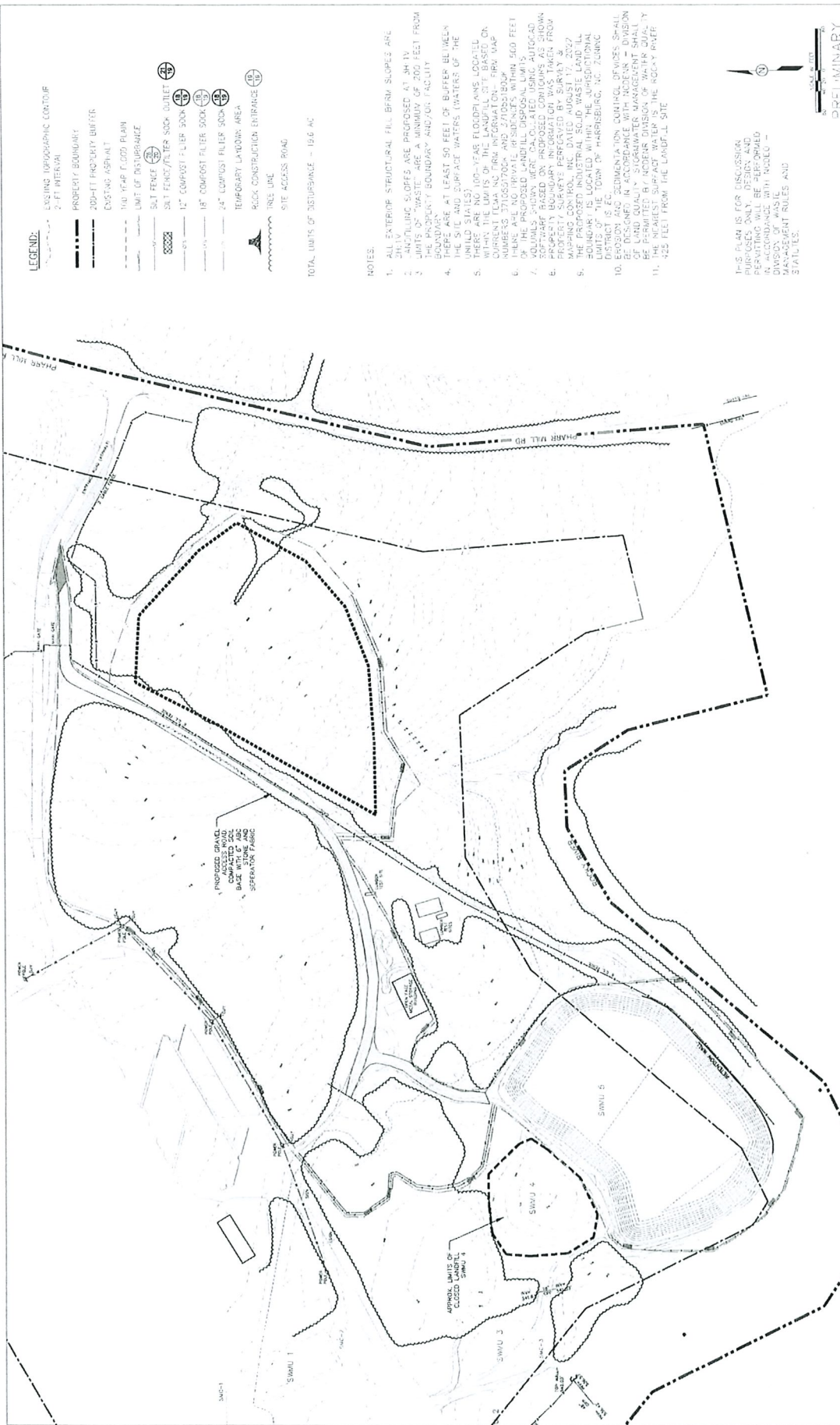


PRELIMINARY

NO.	DATE	BY	REVISION
1	10/25/23	DA	DESIGN FOR PERMITTING - WITH CLIENT TO CORRECTIVE ACTION
2	12/05/23	DA	DESIGN FOR PERMITTING - WITH CLIENT TO CORRECTIVE ACTION
3	12/05/23	DA	DESIGN FOR PERMITTING - WITH CLIENT TO CORRECTIVE ACTION
4	10/25/24	DA	DESIGN FOR PERMITTING - WITH CLIENT TO CORRECTIVE ACTION

VENATOR INDUSTRIAL LANDFILL		HARRISBURG, IN	
VENATOR CHEMICALS, LLC		PROJECT NUMBER	
OWNER	VENATOR CHEMICALS, LLC	PROJECT NUMBER	00-000000
DESIGN NUMBER	00-000000	PROJECT NUMBER	00-000000
PROJECT NUMBER	00-000000	PROJECT NUMBER	00-000000

CROSS SECTIONS 2		16	
SCALE	1"=40'	DATE	JANUARY 23, 2024
PROJECT NO.	00-000000	REVISION NO.	3
PROJECT NO.	00-000000	SHEET NO.	16
PROJECT NO.	00-000000	TOTAL SHEETS	28

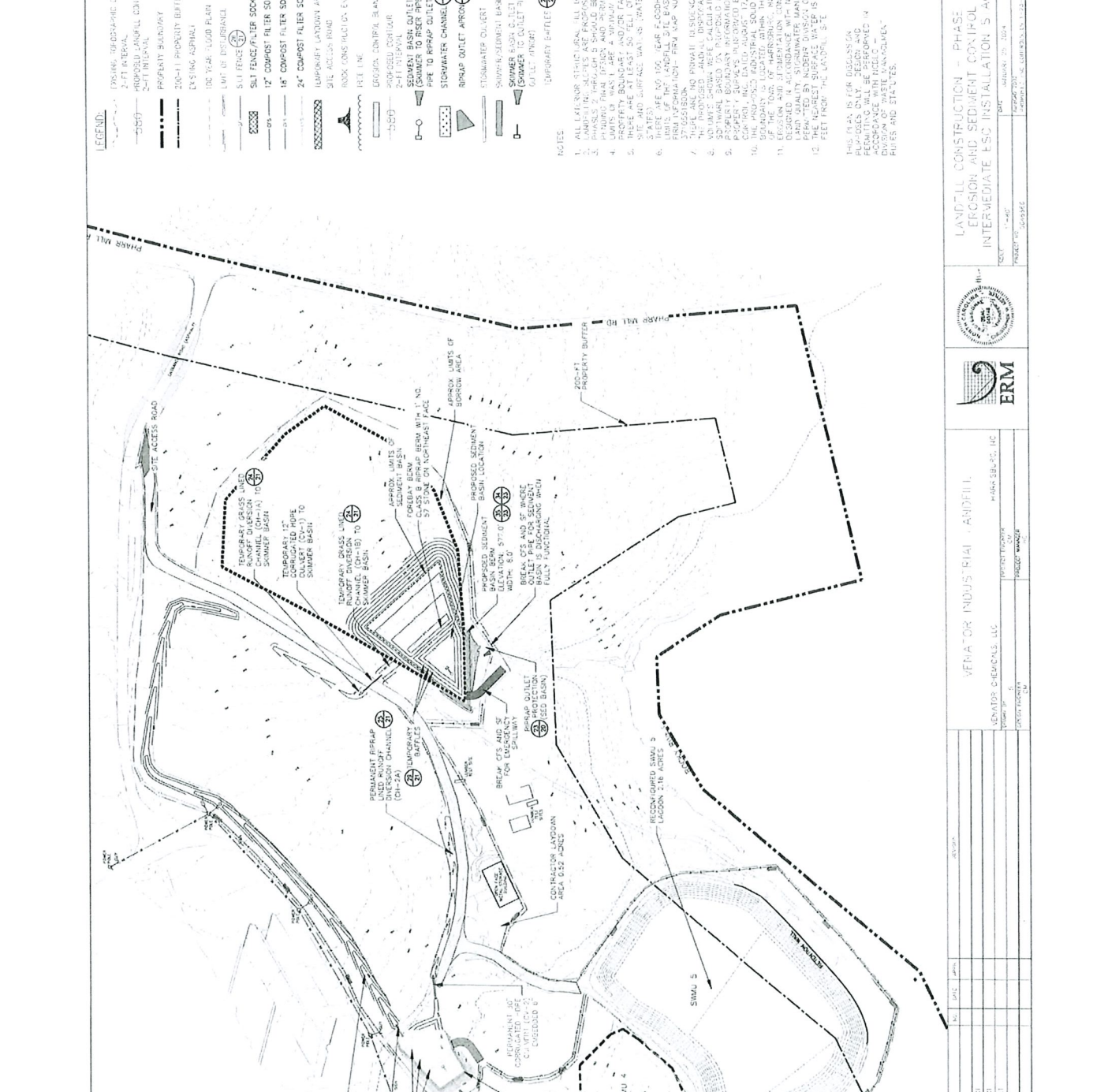


		VENATOR INDUSTRIAL LANDFILL HARRISBURG, NC		PRELIMINARY	
VENATOR DRUGS, LLC SHEET NO. 15 PROJECT NO. 15-001		DATE: JANUARY 25, 2018 SCALE: AS SHOWN		SHEET NO. 17 OF 18	
VENATOR DRUGS, LLC PROJECT NO. 15-001		LANDFILL CONSTRUCTION - PHASE 1 EROSION AND SEDIMENT CONTROL INITIAL ESC AND SILLATION SLICE		SHEET NO. 17 OF 18	

- LEGEND:**
-  EXISTING TOPOGRAPHIC CONTOUR
 -  2-FT INTERVAL
 -  PROPOSED LANDFILL CONTOUR
 -  5-FT INTERVAL
 -  PROPERTY BOUNDARY
 -  200-FT PROPERTY BUFFER
 -  EXISTING ASPHALT
 -  100-YEAR FLOOD PLAIN
 -  LOW WATER OF INUNDATION
 -  5.11 FENCE
 -  5.11 FENCE/FALTER SOCK
 -  12" COMPOST FILTER SOCK
 -  24" COMPOST FILTER SOCK
 -  TEMPORARY ROADWAY AREA
 -  SITE ACCESS ROAD
 -  ROCK CURB (INCLUDE ENTRANCE)
 -  FIRE LINE
 -  EROSION CONTROL BLANKET
 -  PROPOSED CONTOUR
 -  2-FT (10:1) SLOPE
 -  OUTLET STRUCTURE (SUMMER TO RIPRAP PIPE TO DRAINAGE PIPE TO RIPRAP OUTLET APPROX.)
 -  STORMWATER CHANNEL
 -  RIPRAP OUTLET APPROACH
 -  STORMWATER OUTLET
 -  30" DIA. 30" DIAMETER BANK RISER
 -  36" DIA. 36" DIAMETER BANK RISER
 -  42" DIA. 42" DIAMETER BANK RISER
 -  48" DIA. 48" DIAMETER BANK RISER
 -  60" DIA. 60" DIAMETER BANK RISER
 -  72" DIA. 72" DIAMETER BANK RISER
 -  84" DIA. 84" DIAMETER BANK RISER
 -  96" DIA. 96" DIAMETER BANK RISER
 -  108" DIA. 108" DIAMETER BANK RISER
 -  120" DIA. 120" DIAMETER BANK RISER
 -  144" DIA. 144" DIAMETER BANK RISER
 -  168" DIA. 168" DIAMETER BANK RISER
 -  192" DIA. 192" DIAMETER BANK RISER
 -  216" DIA. 216" DIAMETER BANK RISER
 -  240" DIA. 240" DIAMETER BANK RISER
 -  288" DIA. 288" DIAMETER BANK RISER
 -  336" DIA. 336" DIAMETER BANK RISER
 -  384" DIA. 384" DIAMETER BANK RISER
 -  432" DIA. 432" DIAMETER BANK RISER
 -  480" DIA. 480" DIAMETER BANK RISER
 -  528" DIA. 528" DIAMETER BANK RISER
 -  576" DIA. 576" DIAMETER BANK RISER
 -  624" DIA. 624" DIAMETER BANK RISER
 -  672" DIA. 672" DIAMETER BANK RISER
 -  720" DIA. 720" DIAMETER BANK RISER
 -  768" DIA. 768" DIAMETER BANK RISER
 -  816" DIA. 816" DIAMETER BANK RISER
 -  864" DIA. 864" DIAMETER BANK RISER
 -  912" DIA. 912" DIAMETER BANK RISER
 -  960" DIA. 960" DIAMETER BANK RISER
 -  1008" DIA. 1008" DIAMETER BANK RISER
 -  1056" DIA. 1056" DIAMETER BANK RISER
 -  1104" DIA. 1104" DIAMETER BANK RISER
 -  1152" DIA. 1152" DIAMETER BANK RISER
 -  1200" DIA. 1200" DIAMETER BANK RISER

NOTES:

1. ALL EXISTING STRUCTURES AND UTILITIES ARE SHOWN AS PER THE EXISTING PLAN SET.
2. ALL PROPOSED STRUCTURES AND UTILITIES ARE SHOWN AS PER THIS PLAN SET.
3. PHASES 2 THROUGH 5 SHOULD BE CONSIDERED PRELIMINARY IN THAT THEIR DESIGN AND SIZING IS SUBJECT TO CHANGES IN THE PROPERTY BOUNDARY AND/OR FACILITY BOUNDARY.
4. THESE ARE AT LEAST 50 FEET OF BUFFER BETWEEN THE SITE AND SURFACE WATER BODIES OF THE UNITED STATES.
5. THERE ARE NO 100-YEAR FLOODPLAINS LOCATED WITHIN THE LIMITS OF THE LANDFILL SITE BASED ON CURRENT FEMA MAP DATA (FIRM 15053C0210, FIRM 15053C0210 AND 15053C0210).
6. THERE ARE NO PRIVATE PLACES WITHIN 300 FEET OF ANY OF THE PROPOSED STRUCTURES.
7. VOLUNTARY SETBACKS WERE CALCULATED USING A 70' SETBACK BASED ON THE 100-YEAR FLOODPLAIN AS SHOWN ON FEMA MAP DATA (FIRM 15053C0210, FIRM 15053C0210 AND 15053C0210).
8. ALL PROPOSED STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL ZONING ORDINANCE, INCLUDING BUT NOT LIMITED TO THE PROPOSED INDUSTRIAL SOLID WASTE TREATMENT AND DISPOSAL PERMITS (IC-17-00001, IC-17-00002, IC-17-00003, IC-17-00004, IC-17-00005, IC-17-00006, IC-17-00007, IC-17-00008, IC-17-00009, IC-17-00010, IC-17-00011, IC-17-00012, IC-17-00013, IC-17-00014, IC-17-00015, IC-17-00016, IC-17-00017, IC-17-00018, IC-17-00019, IC-17-00020, IC-17-00021, IC-17-00022, IC-17-00023, IC-17-00024, IC-17-00025, IC-17-00026, IC-17-00027, IC-17-00028, IC-17-00029, IC-17-00030, IC-17-00031, IC-17-00032, IC-17-00033, IC-17-00034, IC-17-00035, IC-17-00036, IC-17-00037, IC-17-00038, IC-17-00039, IC-17-00040, IC-17-00041, IC-17-00042, IC-17-00043, IC-17-00044, IC-17-00045, IC-17-00046, IC-17-00047, IC-17-00048, IC-17-00049, IC-17-00050, IC-17-00051, IC-17-00052, IC-17-00053, IC-17-00054, IC-17-00055, IC-17-00056, IC-17-00057, IC-17-00058, IC-17-00059, IC-17-00060, IC-17-00061, IC-17-00062, IC-17-00063, IC-17-00064, IC-17-00065, IC-17-00066, IC-17-00067, IC-17-00068, IC-17-00069, IC-17-00070, IC-17-00071, IC-17-00072, IC-17-00073, IC-17-00074, IC-17-00075, IC-17-00076, IC-17-00077, IC-17-00078, IC-17-00079, IC-17-00080, IC-17-00081, IC-17-00082, IC-17-00083, IC-17-00084, IC-17-00085, IC-17-00086, IC-17-00087, IC-17-00088, IC-17-00089, IC-17-00090, IC-17-00091, IC-17-00092, IC-17-00093, IC-17-00094, IC-17-00095, IC-17-00096, IC-17-00097, IC-17-00098, IC-17-00099, IC-17-00100).
9. THE PROPOSED INDUSTRIAL SOLID WASTE TREATMENT AND DISPOSAL PERMITS (IC-17-00001, IC-17-00002, IC-17-00003, IC-17-00004, IC-17-00005, IC-17-00006, IC-17-00007, IC-17-00008, IC-17-00009, IC-17-00010, IC-17-00011, IC-17-00012, IC-17-00013, IC-17-00014, IC-17-00015, IC-17-00016, IC-17-00017, IC-17-00018, IC-17-00019, IC-17-00020, IC-17-00021, IC-17-00022, IC-17-00023, IC-17-00024, IC-17-00025, IC-17-00026, IC-17-00027, IC-17-00028, IC-17-00029, IC-17-00030, IC-17-00031, IC-17-00032, IC-17-00033, IC-17-00034, IC-17-00035, IC-17-00036, IC-17-00037, IC-17-00038, IC-17-00039, IC-17-00040, IC-17-00041, IC-17-00042, IC-17-00043, IC-17-00044, IC-17-00045, IC-17-00046, IC-17-00047, IC-17-00048, IC-17-00049, IC-17-00050, IC-17-00051, IC-17-00052, IC-17-00053, IC-17-00054, IC-17-00055, IC-17-00056, IC-17-00057, IC-17-00058, IC-17-00059, IC-17-00060, IC-17-00061, IC-17-00062, IC-17-00063, IC-17-00064, IC-17-00065, IC-17-00066, IC-17-00067, IC-17-00068, IC-17-00069, IC-17-00070, IC-17-00071, IC-17-00072, IC-17-00073, IC-17-00074, IC-17-00075, IC-17-00076, IC-17-00077, IC-17-00078, IC-17-00079, IC-17-00080, IC-17-00081, IC-17-00082, IC-17-00083, IC-17-00084, IC-17-00085, IC-17-00086, IC-17-00087, IC-17-00088, IC-17-00089, IC-17-00090, IC-17-00091, IC-17-00092, IC-17-00093, IC-17-00094, IC-17-00095, IC-17-00096, IC-17-00097, IC-17-00098, IC-17-00099, IC-17-00100).
10. ALL PROPOSED STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL ZONING ORDINANCE, INCLUDING BUT NOT LIMITED TO THE PROPOSED INDUSTRIAL SOLID WASTE TREATMENT AND DISPOSAL PERMITS (IC-17-00001, IC-17-00002, IC-17-00003, IC-17-00004, IC-17-00005, IC-17-00006, IC-17-00007, IC-17-00008, IC-17-00009, IC-17-00010, IC-17-00011, IC-17-00012, IC-17-00013, IC-17-00014, IC-17-00015, IC-17-00016, IC-17-00017, IC-17-00018, IC-17-00019, IC-17-00020, IC-17-00021, IC-17-00022, IC-17-00023, IC-17-00024, IC-17-00025, IC-17-00026, IC-17-00027, IC-17-00028, IC-17-00029, IC-17-00030, IC-17-00031, IC-17-00032, IC-17-00033, IC-17-00034, IC-17-00035, IC-17-00036, IC-17-00037, IC-17-00038, IC-17-00039, IC-17-00040, IC-17-00041, IC-17-00042, IC-17-00043, IC-17-00044, IC-17-00045, IC-17-00046, IC-17-00047, IC-17-00048, IC-17-00049, IC-17-00050, IC-17-00051, IC-17-00052, IC-17-00053, IC-17-00054, IC-17-00055, IC-17-00056, IC-17-00057, IC-17-00058, IC-17-00059, IC-17-00060, IC-17-00061, IC-17-00062, IC-17-00063, IC-17-00064, IC-17-00065, IC-17-00066, IC-17-00067, IC-17-00068, IC-17-00069, IC-17-00070, IC-17-00071, IC-17-00072, IC-17-00073, IC-17-00074, IC-17-00075, IC-17-00076, IC-17-00077, IC-17-00078, IC-17-00079, IC-17-00080, IC-17-00081, IC-17-00082, IC-17-00083, IC-17-00084, IC-17-00085, IC-17-00086, IC-17-00087, IC-17-00088, IC-17-00089, IC-17-00090, IC-17-00091, IC-17-00092, IC-17-00093, IC-17-00094, IC-17-00095, IC-17-00096, IC-17-00097, IC-17-00098, IC-17-00099, IC-17-00100).
11. THE PROPOSED INDUSTRIAL SOLID WASTE TREATMENT AND DISPOSAL PERMITS (IC-17-00001, IC-17-00002, IC-17-00003, IC-17-00004, IC-17-00005, IC-17-00006, IC-17-00007, IC-17-00008, IC-17-00009, IC-17-00010, IC-17-00011, IC-17-00012, IC-17-00013, IC-17-00014, IC-17-00015, IC-17-00016, IC-17-00017, IC-17-00018, IC-17-00019, IC-17-00020, IC-17-00021, IC-17-00022, IC-17-00023, IC-17-00024, IC-17-00025, IC-17-00026, IC-17-00027, IC-17-00028, IC-17-00029, IC-17-00030, IC-17-00031, IC-17-00032, IC-17-00033, IC-17-00034, IC-17-00035, IC-17-00036, IC-17-00037, IC-17-00038, IC-17-00039, IC-17-00040, IC-17-00041, IC-17-00042, IC-17-00043, IC-17-00044, IC-17-00045, IC-17-00046, IC-17-00047, IC-17-00048, IC-17-00049, IC-17-00050, IC-17-00051, IC-17-00052, IC-17-00053, IC-17-00054, IC-17-00055, IC-17-00056, IC-17-00057, IC-17-00058, IC-17-00059, IC-17-00060, IC-17-00061, IC-17-00062, IC-17-00063, IC-17-00064, IC-17-00065, IC-17-00066, IC-17-00067, IC-17-00068, IC-17-00069, IC-17-00070, IC-17-00071, IC-17-00072, IC-17-00073, IC-17-00074, IC-17-00075, IC-17-00076, IC-17-00077, IC-17-00078, IC-17-00079, IC-17-00080, IC-17-00081, IC-17-00082, IC-17-00083, IC-17-00084, IC-17-00085, IC-17-00086, IC-17-00087, IC-17-00088, IC-17-00089, IC-17-00090, IC-17-00091, IC-17-00092, IC-17-00093, IC-17-00094, IC-17-00095, IC-17-00096, IC-17-00097, IC-17-00098, IC-17-00099, IC-17-00100).
12. THIS PLAN IS FOR OBSERVATION PURPOSES ONLY. FIELD AND PERMITS SHALL BE OBTAINED FROM THE NORTH CAROLINA DEPARTMENT OF WASTE MANAGEMENT BEFORE CONSTRUCTION.



PRELIMINARY

**LANDFILL CONSTRUCTION - PHASE 1
EROSION AND SEDIMENT CONTROL
INTERMEDIATE P-3C INSTALLATION 5-ACE**

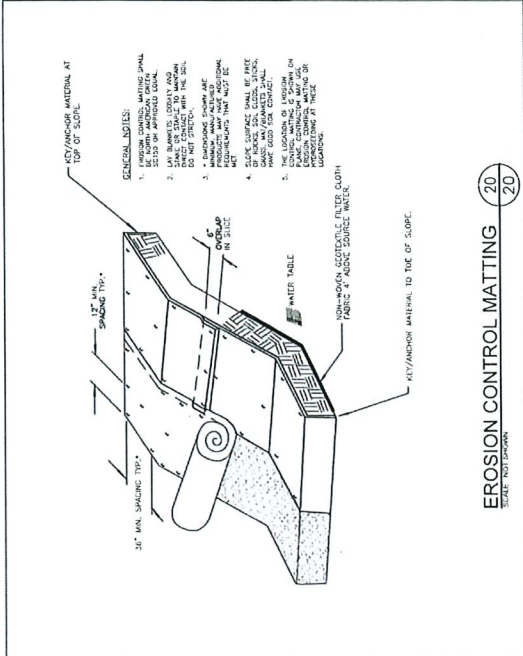
NO. 114557 DATE: JANUARY 29, 2024
 PROJECT: 24-0348E
 DRAWING NO. 14

REV NO 3

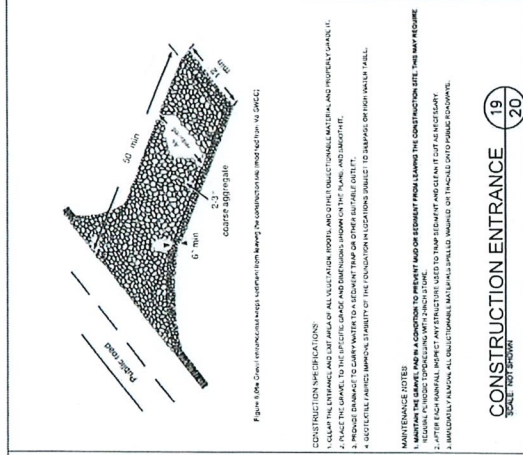
ERM
ENVIRONMENTAL RESTORATION MANAGEMENT

VENATOR INDUSTRIAL LANDFILL
 VENA-TOR INDUSTRIAL, LLC HARRISBURG, NC
 PROJECT NO. 114557
 DRAWING NO. 14

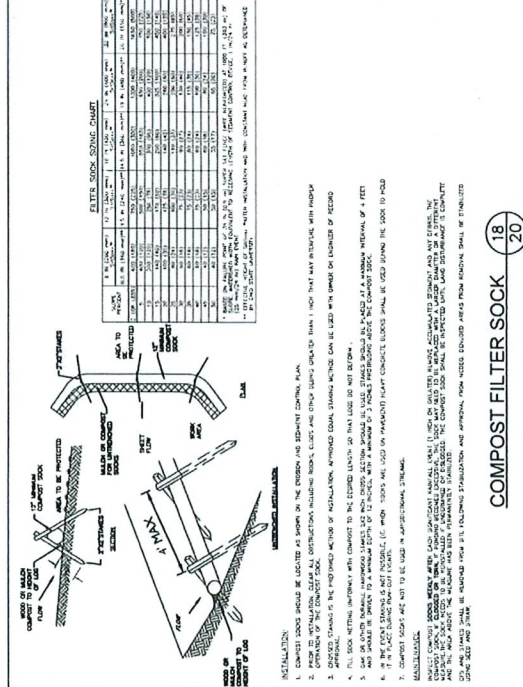
NO.	DESCRIPTION	DATE
1	ISSUE SET FOR THE PROJECT	01/29/24
2	ISSUE SET FOR THE PROJECT	01/29/24
3	ISSUE SET FOR THE PROJECT	01/29/24



EROSION CONTROL MATTING
SCALE: NOT SHOWN



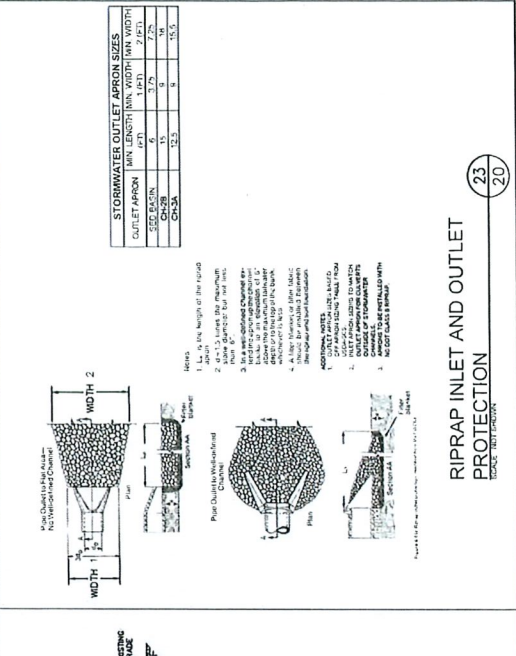
CONSTRUCTION ENTRANCE
SCALE: NOT SHOWN



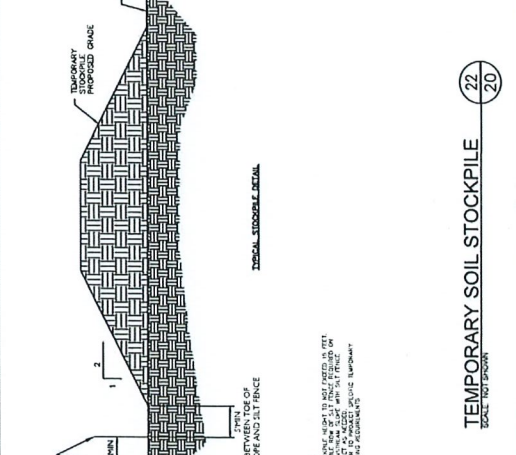
COMPOST FILTER SOCK
SCALE: NOT SHOWN

GENERAL NOTES:

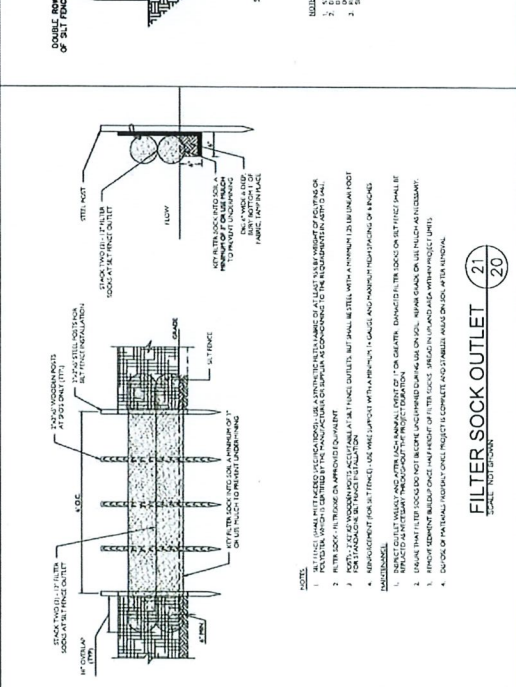
1. EROSION CONTROL MATTING SHALL BE 12\"/>
- 2. THE LOCATION OF EROSION CONTROL MATTING SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
- 3. THE LOCATION OF EROSION CONTROL MATTING SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
- 4. THE LOCATION OF EROSION CONTROL MATTING SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
- 5. THE LOCATION OF EROSION CONTROL MATTING SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.



TEMPORARY SOIL STOCKPILE
SCALE: NOT SHOWN



RIPRAP INLET AND OUTLET PROTECTION
SCALE: NOT SHOWN



FILTER SOCK OUTLET
SCALE: NOT SHOWN

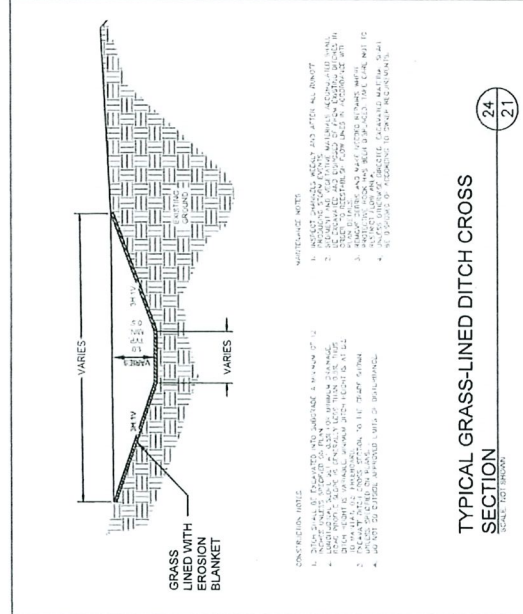
GENERAL NOTES:

1. ALL FILTER SOCKS SHALL BE 12\"/>
- 2. THE LOCATION OF FILTER SOCKS SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
- 3. THE LOCATION OF FILTER SOCKS SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
- 4. THE LOCATION OF FILTER SOCKS SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
- 5. THE LOCATION OF FILTER SOCKS SHALL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

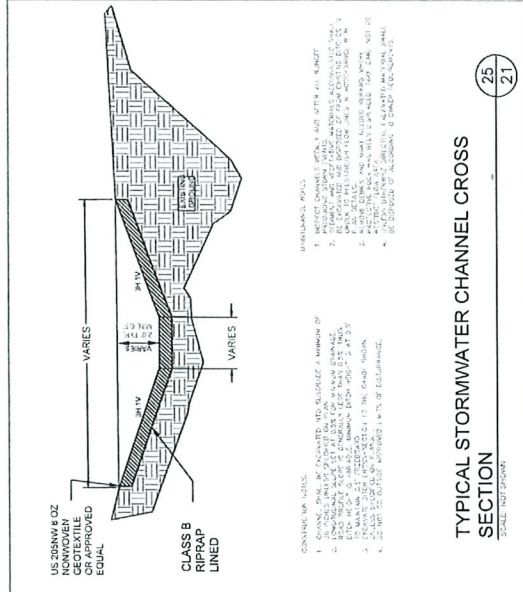
NO.	DATE	BY	DATE	APP'D.	REVISION
1	11/20/21	DM			
2	12/22/21	DM			
3	01/25/24	DM			

VENATOR INDUSTRIAL LANDFILL	HARRISBURG, NC
VENATOR CHEMICALS, LLC	PROJECT NO. 2024-01
OWNER: VENATOR CHEMICALS, LLC	DESIGNER: ERM
PROJECT NO. 2024-01	PROJECT SHEET NO. 20

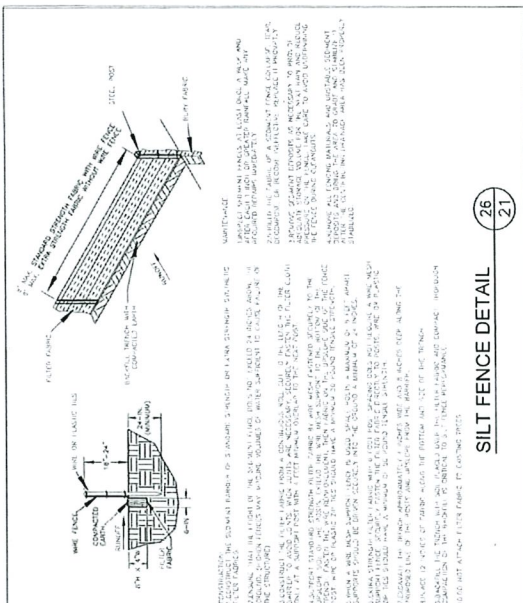
DATE	20
REV. NO.	3
DATE	20
REV. NO.	28



TYPICAL GRASS-LINED DITCH CROSS SECTION
SCALE: 1/8\"/>



TYPICAL STORMWATER CHANNEL CROSS SECTION
SCALE: 1/8\"/>



TYPICAL SILT FENCE DETAIL
SCALE: 1/8\"/>

TEMPORARY SEEDING SPECIFICATIONS:

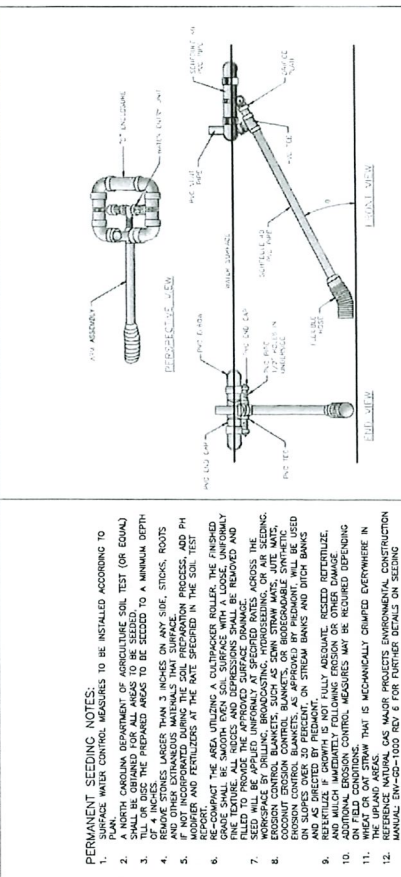
DATE	SEEDING RATE
JUN 1 - MAY 1	50 lb./ac
MAY 1 - AUG 15	40 lb./ac
AUG 15 - DEC 31	20 lb./ac

PERMANENT SEEDING SPECIFICATIONS:

DATE	SEEDING RATE
MAY 1 - AUG 15	15 lb./ac
AUG 15 - MAY 1	20 lb./ac

NEW STABILIZATION TIMEFRAMES
(Minimum 30 days)

STABILIZATION	PERMANENT	TEMPORARY
Perimeter dikes, berms, ditches, slopes	7 days	None
High Quality Water (HQM) Zones	7 days	None
Slopes steeper than 3:1	7 days	14 days, min. 10' or less in length and not steeper than 2:1. 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 60' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQM Zones.



TYPICAL SKIMMER
SCALE: 1/8\"/>

SEEDING STABILIZATION
SCALE: 1/8\"/>

DATE	SEEDING RATE
JUN 1 - MAY 1	50 lb./ac
MAY 1 - AUG 15	40 lb./ac
AUG 15 - DEC 31	20 lb./ac

SEEDING STABILIZATION
SCALE: 1/8\"/>

VENATOR INDUSTRIAL LANDFILL
1405 BURG, NC

VENATOR CHEMICALS, L.C.
1405 BURG, NC

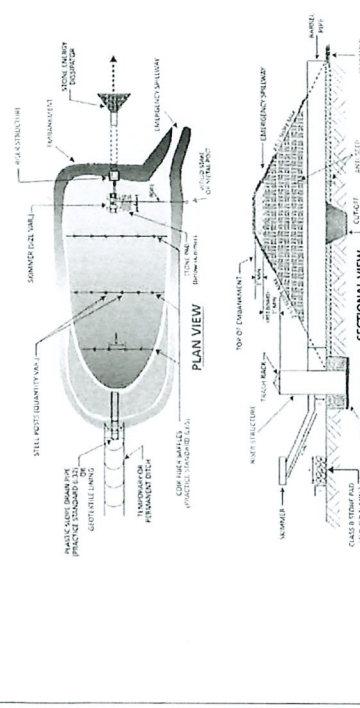
ERM
ENVIRONMENTAL RISK MANAGEMENT

EROSION AND SEDIMENT CONTROL DETAILS

PROJECT NO: 2010-0001
DATE: 01/15/10
SCALE: 1/8\"/>

1. In preparation of the plan and section views, the user should refer to the construction notes for details regarding the design of the emergency spillway. The spillway structure should be designed to meet the design criteria of the emergency spillway.
2. The spillway structure should be designed to meet the design criteria of the emergency spillway. The spillway structure should be designed to meet the design criteria of the emergency spillway.
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1. Construction Specifications
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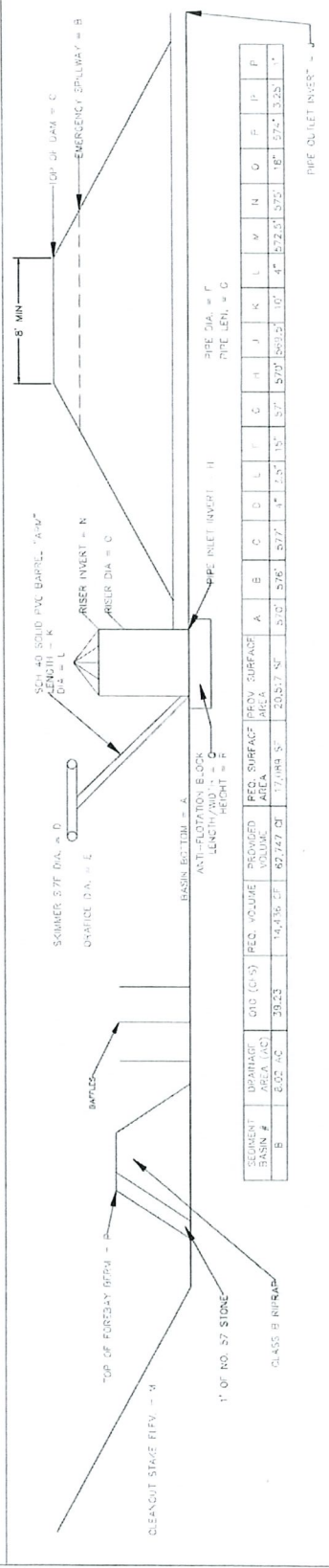
NOTES

1. THE USER SHOULD REFER TO THE CONSTRUCTION NOTES FOR DETAILS REGARDING THE DESIGN OF THE EMERGENCY SPILLWAY.
2. THE SPILLWAY STRUCTURE SHOULD BE DESIGNED TO MEET THE DESIGN CRITERIA OF THE EMERGENCY SPILLWAY.
3. THE SPILLWAY STRUCTURE SHOULD BE DESIGNED TO MEET THE DESIGN CRITERIA OF THE EMERGENCY SPILLWAY.
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10. THE SPILLWAY STRUCTURE SHOULD BE DESIGNED TO MEET THE DESIGN CRITERIA OF THE EMERGENCY SPILLWAY.

34
23

SEDIMENT BASIN

NOT TO SCALE



35
23

SEDIMENT BASIN DATA

DO NOT SCALE

DATE	10/22/21	BY	WJL	REVISED	DATE	10/22/21	BY	WJL	
NO.	102201	DESCRIPTION	SEDIMENT BASIN DATA	PROJECT NO.	23	DATE	10/22/21	BY	WJL
NO.	102201	DESCRIPTION	SEDIMENT BASIN DATA	PROJECT NO.	23	DATE	10/22/21	BY	WJL
NO.	102201	DESCRIPTION	SEDIMENT BASIN DATA	PROJECT NO.	23	DATE	10/22/21	BY	WJL
NO.	102201	DESCRIPTION	SEDIMENT BASIN DATA	PROJECT NO.	23	DATE	10/22/21	BY	WJL

ERM

VENATOR INDUSTRIAL LANDFILL

EVANOR CHEMICALS - LLC

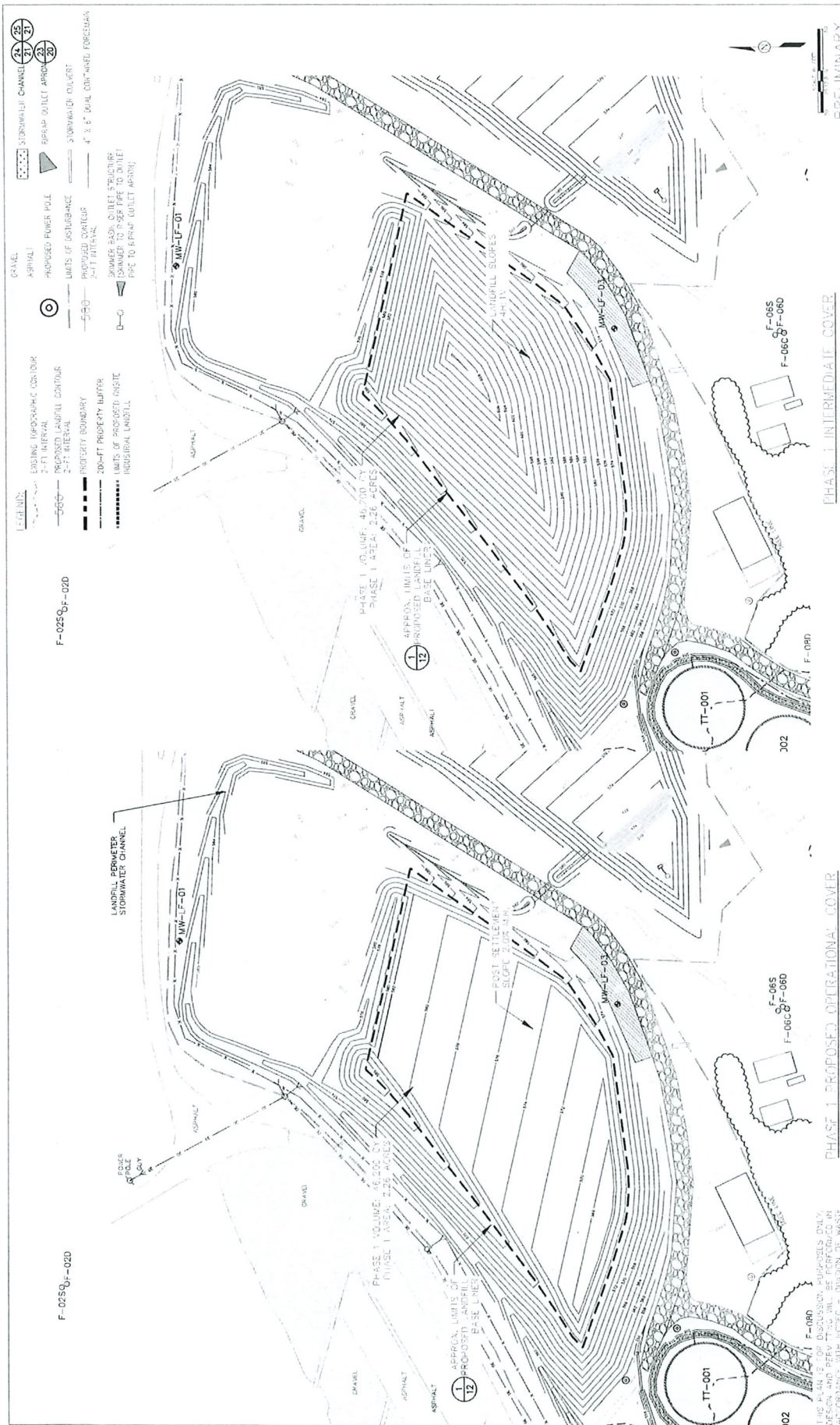
HARRISBURG, NC

FROSON AND SEDIMENT CONTROL - DETAILS

DATE: JUNE 23, 2024

PROJECT NO.: 23

REVISED: 10/22/21



- LEGEND:**
- EXISTING TOPOGRAPHIC CONTOUR
 - 2-FT INTERVAL
 - PROPOSED LANDFILL CONTOUR
 - 2-FT INTERVAL
 - PROPERTY BOUNDARY
 - 200-FT PROPERTY BUFFER
 - LIMITS OF PROPOSED ON-SITE INDUSTRIAL LANDFILL
 - GRAVEL
 - ASPHALT
 - PROPOSED POWER POLE
 - LIMITS OF DISTURBANCE
 - PROPOSED STORMWATER
 - 2-FT INTERVAL
 - STORMWATER CHANNEL
 - STORMWATER OUTLET APPROX.
 - STORMWATER OUTLET
 - 4" x 8" DUAL CONTAINED FOREDRAG
 - SWAMP BASIN WITH STORMWATER
 - SWAMP TO SETOFF TO OUTLET
 - PIPE TO REPAIR OUTLET APPROX.

F-025 OF-02D

PHASE 1 VOLUME: 46,700 CY
PHASE 1 AREA: 238 ACRES

APPROX. LIMITS OF PROPOSED LANDFILL BASE LINES

POST SETTLE-BACK SLOPE: 2:0.5 (2%)

LANDFILL PERIMETER STORMWATER CHANNEL

MM-LF-01

MM-LF-03

MM-LF-05

TT-001

F-065
F-066
F-068

302

F-025 OF-02D

PHASE 1 VOLUME: 46,700 CY
PHASE 1 AREA: 238 ACRES

APPROX. LIMITS OF PROPOSED LANDFILL BASE LINES

POST SETTLE-BACK SLOPE: 2:0.5 (2%)

LANDFILL PERIMETER STORMWATER CHANNEL

MM-LF-01

MM-LF-03

MM-LF-05

TT-001

F-065
F-066
F-068

302

F-025 OF-02D

PHASE 1 VOLUME: 46,700 CY
PHASE 1 AREA: 238 ACRES

APPROX. LIMITS OF PROPOSED LANDFILL BASE LINES

POST SETTLE-BACK SLOPE: 2:0.5 (2%)

LANDFILL PERIMETER STORMWATER CHANNEL

MM-LF-01

MM-LF-03

MM-LF-05

TT-001

F-065
F-066
F-068

302

F-025 OF-02D

PHASE 1 VOLUME: 46,700 CY
PHASE 1 AREA: 238 ACRES

APPROX. LIMITS OF PROPOSED LANDFILL BASE LINES

POST SETTLE-BACK SLOPE: 2:0.5 (2%)

LANDFILL PERIMETER STORMWATER CHANNEL

MM-LF-01

MM-LF-03

MM-LF-05

TT-001

F-065
F-066
F-068

302

F-025 OF-02D

PHASE 1 VOLUME: 46,700 CY
PHASE 1 AREA: 238 ACRES

APPROX. LIMITS OF PROPOSED LANDFILL BASE LINES

POST SETTLE-BACK SLOPE: 2:0.5 (2%)

LANDFILL PERIMETER STORMWATER CHANNEL

MM-LF-01

MM-LF-03

MM-LF-05

TT-001

F-065
F-066
F-068

302

PHASE 1 INTERMEDIARY COVER

PHASE 1 PROPOSED OPERATIONAL COVER

VENATOR INDUSTRIAL LANDFILL

VENATOR CHEMICALS, LLC
1440 HENRIUS, INC.
PROJECT NUMBER: 001
SHEET NUMBER: 001

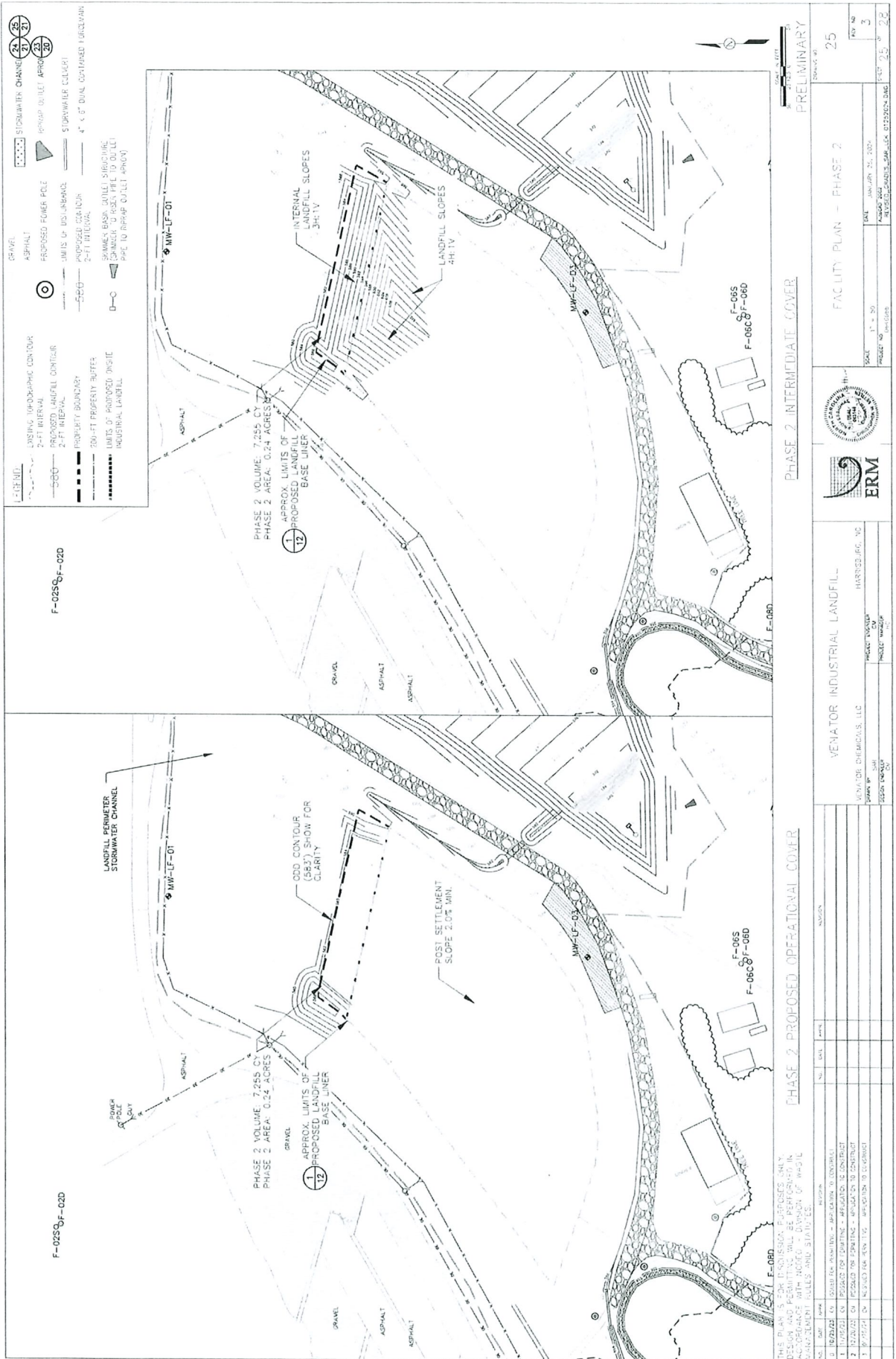
DATE: JANUARY 22, 2024
PROJECT NO: 24-0668

FACILITY PLAN - PHASE 1

DATE: JANUARY 22, 2024
PROJECT NO: 24-0668

PRELIMINARY

NO.	DATE	BY	APP'D	REVISION
1	10/27/22	DM		ISSUE FOR PERMITTING (3 22/2024)
2	11/15/22	DM		ISSUE FOR PERMITTING - ADDITIONAL TO 0001
3	11/15/22	DM		ISSUE FOR PERMITTING - ADDITIONAL TO 0001
4	11/15/22	DM		ISSUE FOR PERMITTING - ADDITIONAL TO 0001



LEGEND

EXISTING TOPOGRAPHIC CONTOUR	2'-FT INTERVAL	PROPOSED LANDFILL CONTOUR	2'-FT INTERVAL
PROPERTY BOUNDARY	750-FT PROPERTY BUFFER	LIMITS OF PROPOSED INDUSTRIAL LANDFILL	
EXISTING STORMWATER CHANNEL		PROPOSED FURROW POLE	
PROPOSED STORMWATER CHANNEL		STORMWATER CULVERT	
PROPOSED MANHOLE		4" x 8" DUAL COMPRESSED FURROWWALL PIPE TO RIPRAP OUTLET (HANDY)	
PROPOSED 12" DRAINAGE			
PROPOSED 24" DRAINAGE			
PROPOSED 36" DRAINAGE			
PROPOSED 48" DRAINAGE			
PROPOSED 60" DRAINAGE			
PROPOSED 72" DRAINAGE			
PROPOSED 84" DRAINAGE			
PROPOSED 96" DRAINAGE			
PROPOSED 108" DRAINAGE			
PROPOSED 120" DRAINAGE			
PROPOSED 132" DRAINAGE			
PROPOSED 144" DRAINAGE			
PROPOSED 156" DRAINAGE			
PROPOSED 168" DRAINAGE			
PROPOSED 180" DRAINAGE			
PROPOSED 192" DRAINAGE			
PROPOSED 204" DRAINAGE			
PROPOSED 216" DRAINAGE			
PROPOSED 228" DRAINAGE			
PROPOSED 240" DRAINAGE			
PROPOSED 252" DRAINAGE			
PROPOSED 264" DRAINAGE			
PROPOSED 276" DRAINAGE			
PROPOSED 288" DRAINAGE			
PROPOSED 300" DRAINAGE			
PROPOSED 312" DRAINAGE			
PROPOSED 324" DRAINAGE			
PROPOSED 336" DRAINAGE			
PROPOSED 348" DRAINAGE			
PROPOSED 360" DRAINAGE			
PROPOSED 372" DRAINAGE			
PROPOSED 384" DRAINAGE			
PROPOSED 396" DRAINAGE			
PROPOSED 408" DRAINAGE			
PROPOSED 420" DRAINAGE			
PROPOSED 432" DRAINAGE			
PROPOSED 444" DRAINAGE			
PROPOSED 456" DRAINAGE			
PROPOSED 468" DRAINAGE			
PROPOSED 480" DRAINAGE			
PROPOSED 492" DRAINAGE			
PROPOSED 504" DRAINAGE			
PROPOSED 516" DRAINAGE			
PROPOSED 528" DRAINAGE			
PROPOSED 540" DRAINAGE			
PROPOSED 552" DRAINAGE			
PROPOSED 564" DRAINAGE			
PROPOSED 576" DRAINAGE			
PROPOSED 588" DRAINAGE			
PROPOSED 600" DRAINAGE			
PROPOSED 612" DRAINAGE			
PROPOSED 624" DRAINAGE			
PROPOSED 636" DRAINAGE			
PROPOSED 648" DRAINAGE			
PROPOSED 660" DRAINAGE			
PROPOSED 672" DRAINAGE			
PROPOSED 684" DRAINAGE			
PROPOSED 696" DRAINAGE			
PROPOSED 708" DRAINAGE			
PROPOSED 720" DRAINAGE			
PROPOSED 732" DRAINAGE			
PROPOSED 744" DRAINAGE			
PROPOSED 756" DRAINAGE			
PROPOSED 768" DRAINAGE			
PROPOSED 780" DRAINAGE			
PROPOSED 792" DRAINAGE			
PROPOSED 804" DRAINAGE			
PROPOSED 816" DRAINAGE			
PROPOSED 828" DRAINAGE			
PROPOSED 840" DRAINAGE			
PROPOSED 852" DRAINAGE			
PROPOSED 864" DRAINAGE			
PROPOSED 876" DRAINAGE			
PROPOSED 888" DRAINAGE			
PROPOSED 900" DRAINAGE			
PROPOSED 912" DRAINAGE			
PROPOSED 924" DRAINAGE			
PROPOSED 936" DRAINAGE			
PROPOSED 948" DRAINAGE			
PROPOSED 960" DRAINAGE			
PROPOSED 972" DRAINAGE			
PROPOSED 984" DRAINAGE			
PROPOSED 996" DRAINAGE			
PROPOSED 1008" DRAINAGE			
PROPOSED 1020" DRAINAGE			
PROPOSED 1032" DRAINAGE			
PROPOSED 1044" DRAINAGE			
PROPOSED 1056" DRAINAGE			
PROPOSED 1068" DRAINAGE			
PROPOSED 1080" DRAINAGE			
PROPOSED 1092" DRAINAGE			
PROPOSED 1104" DRAINAGE			
PROPOSED 1116" DRAINAGE			
PROPOSED 1128" DRAINAGE			
PROPOSED 1140" DRAINAGE			
PROPOSED 1152" DRAINAGE			
PROPOSED 1164" DRAINAGE			
PROPOSED 1176" DRAINAGE			
PROPOSED 1188" DRAINAGE			
PROPOSED 1200" DRAINAGE			
PROPOSED 1212" DRAINAGE			
PROPOSED 1224" DRAINAGE			
PROPOSED 1236" DRAINAGE			
PROPOSED 1248" DRAINAGE			
PROPOSED 1260" DRAINAGE			
PROPOSED 1272" DRAINAGE			
PROPOSED 1284" DRAINAGE			
PROPOSED 1296" DRAINAGE			
PROPOSED 1308" DRAINAGE			
PROPOSED 1320" DRAINAGE			
PROPOSED 1332" DRAINAGE			
PROPOSED 1344" DRAINAGE			
PROPOSED 1356" DRAINAGE			
PROPOSED 1368" DRAINAGE			
PROPOSED 1380" DRAINAGE			
PROPOSED 1392" DRAINAGE			
PROPOSED 1404" DRAINAGE			
PROPOSED 1416" DRAINAGE			
PROPOSED 1428" DRAINAGE			
PROPOSED 1440" DRAINAGE			
PROPOSED 1452" DRAINAGE			
PROPOSED 1464" DRAINAGE			
PROPOSED 1476" DRAINAGE			
PROPOSED 1488" DRAINAGE			
PROPOSED 1500" DRAINAGE			

PHASE 2 INTERMEDIATE COVER
 PRELIMINARY
 (REVISED 01)

PHASE 2 PROPOSED OPERATIONAL COVER

VENATOR INDUSTRIAL LANDFILL
 HARRISBURG, PA, USA
 PROJECT NUMBER: 15-001
 PROJECT NAME: VENATOR INDUSTRIAL LANDFILL
 PROJECT NUMBER: 15-001

SCALE: 1" = 50'
 PROJECT NO: 15-001

DATE: 01/20/2015
 DRAWN BY: J. B. BROWN
 CHECKED BY: J. B. BROWN
 PROJECT NUMBER: 15-001

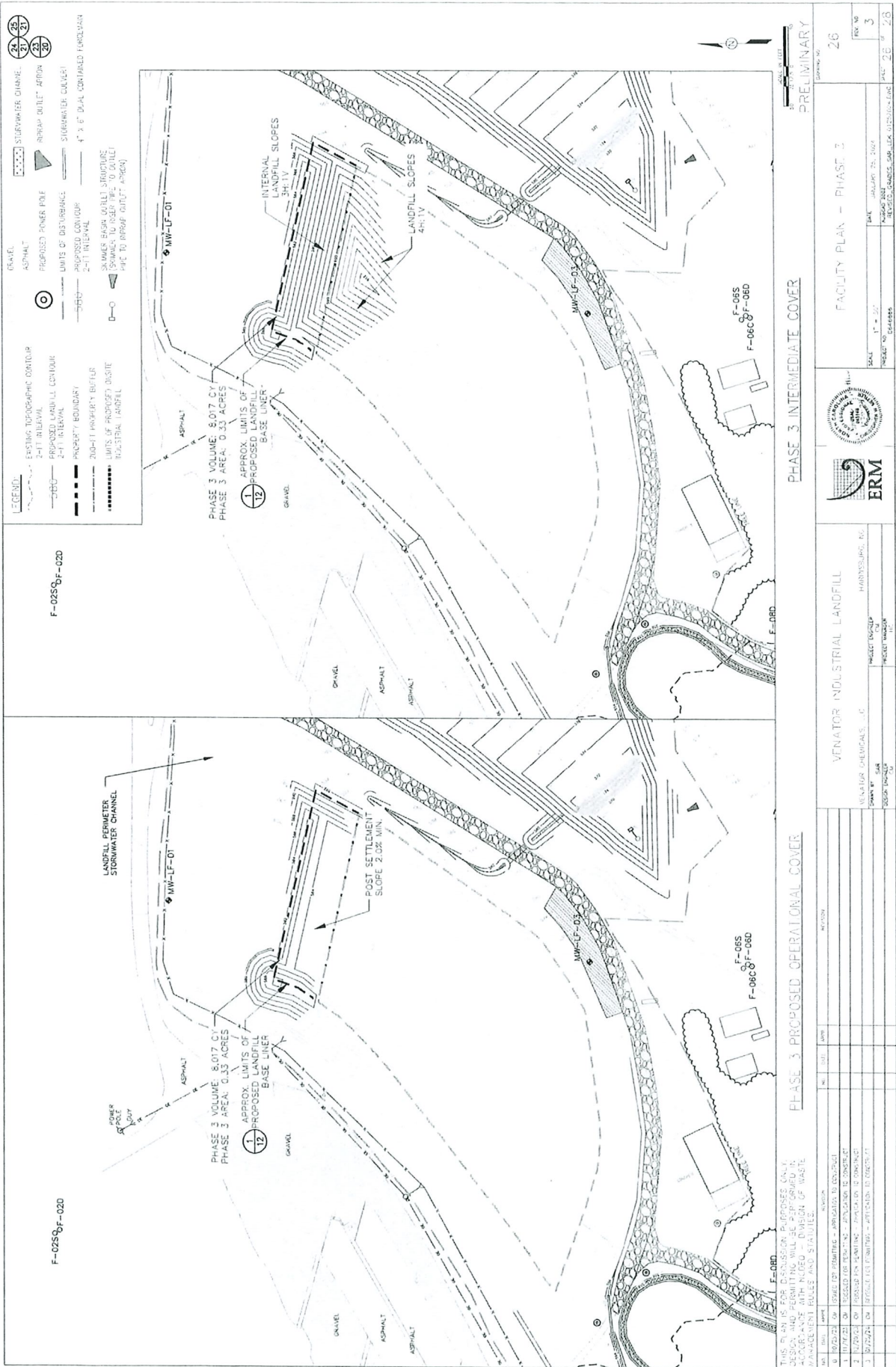
VENATOR INDUSTRIAL LANDFILL
 HARRISBURG, PA, USA
 PROJECT NUMBER: 15-001
 PROJECT NAME: VENATOR INDUSTRIAL LANDFILL
 PROJECT NUMBER: 15-001

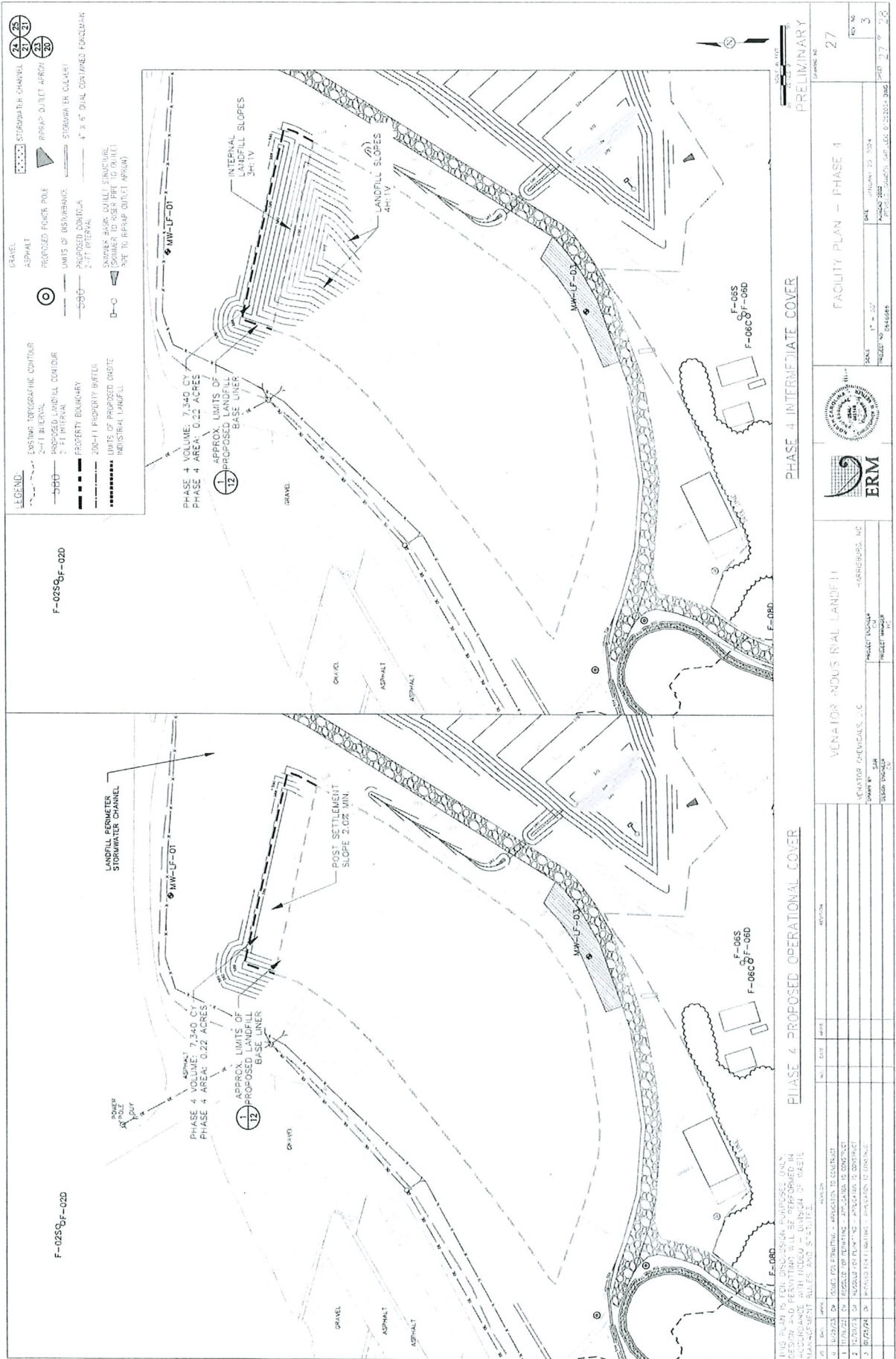
PHASE 2 PROPOSED OPERATIONAL COVER

PHASE 2 INTERMEDIATE COVER
 PRELIMINARY
 (REVISED 01)

THIS PLAN IS FOR INFORMATION PURPOSES ONLY. DESIGN AND PERMITS WILL BE PERFORMED IN ACCORDANCE WITH THE REGULATIONS OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

NO.	DATE	DESCRIPTION
1	10/20/2014	DATE FOR PERMITS - APPLICATION TO CORRELL
2	10/20/2014	PERMITS FOR CONTRACTING - APPLICATION TO CORRELL
3	10/20/2014	PERMITS FOR CONTRACTING - APPLICATION TO CORRELL
4	10/20/2014	PERMITS FOR CONTRACTING - APPLICATION TO CORRELL





- LEGEND:**
- EXISTING TOPOGRAPHIC CONTOUR
 - 2'-FT INTERVAL
 - PROPOSED LANDFILL CONTOUR
 - 2'-FT INTERVAL
 - PROPERTY BOUNDARY
 - 200'-FT PROPERTY BARRIER
 - LIMITS OF PROPOSED DIGESTION
 - INDUSTRIAL LANDFILL
 - GRAVEL
 - ASPHALT
 - REDUCED FORCE POLE
 - UNIT OF DISTURBANCE
 - PROPOSED CONDUIT
 - 2'-FT INTERVAL
 - 4" x 6" DUAL COMPACTED FLOORING
 - STORMWATER CHANNEL
 - INFLAT-OUTLET ARCH
 - STORMWATER CULVERT
 - 4" x 6" DUAL COMPACTED FLOORING
 - SKIMMER BASIN/BUILT STRUCTURE
 - (SUMMER TO RISK FREE TO OULET)
 - PIPE TO REPAIR/OUTLET (RFR)

PHASE 4 VOLUME: 7,340 CY
 PHASE 4 AREA: 0.22 ACRES

APPROX. LIMITS OF
 PROPOSED LANDFILL
 BASE LINER

PHASE 4 INTERMEDIATE COVER

PHASE 4 PROPOSED OPERATIONAL COVER

THIS PLAN IS FOR DISCUSSION PURPOSES ONLY.
 DESIGN AND PERMITTING WILL BE PERFORMED IN
 ACCORDANCE WITH FEDERAL, STATE AND LOCAL
 REGULATORY RULES AND STATUTES.

NO.	DATE	DESCRIPTION
1	01/20/24	ISSUE FOR PERMITTING - APPROXIMATE TO CONCEPT
2	02/20/24	ISSUE FOR PERMITTING - APPROXIMATE TO CONCEPT
3	03/20/24	ISSUE FOR PERMITTING - APPROXIMATE TO CONCEPT
4	04/20/24	ISSUE FOR PERMITTING - APPROXIMATE TO CONCEPT

VENATOR INDUSTRIAL LANDFILL		FORBESBURG, NC	
PROJECT USUAL		PROJECT NO. 24	
PROJECT WORK		DESIGN NO. 24	

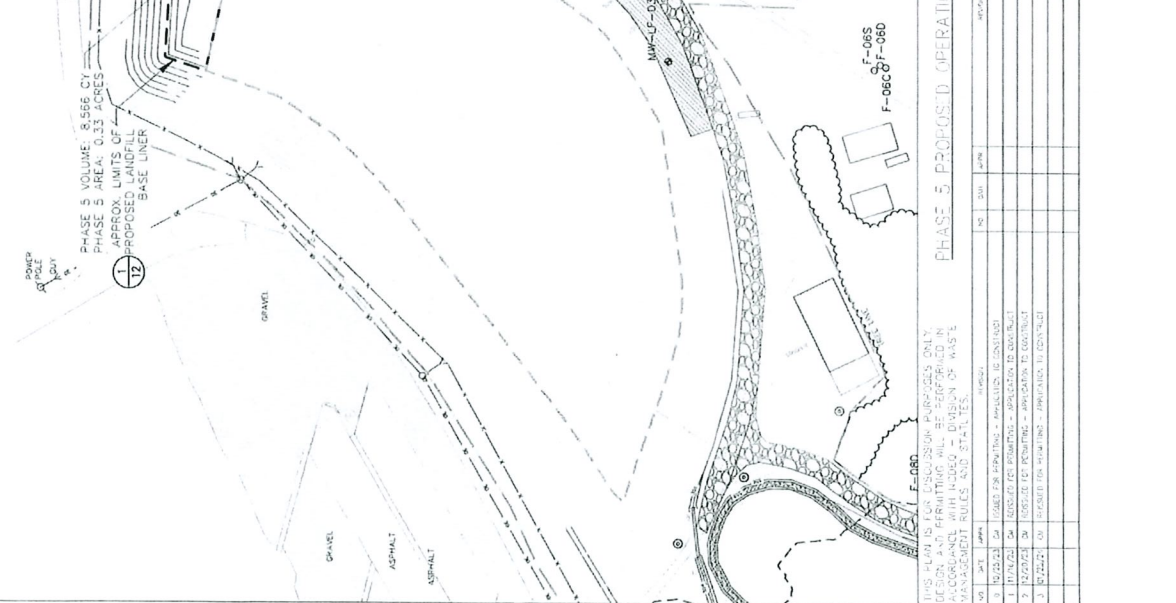
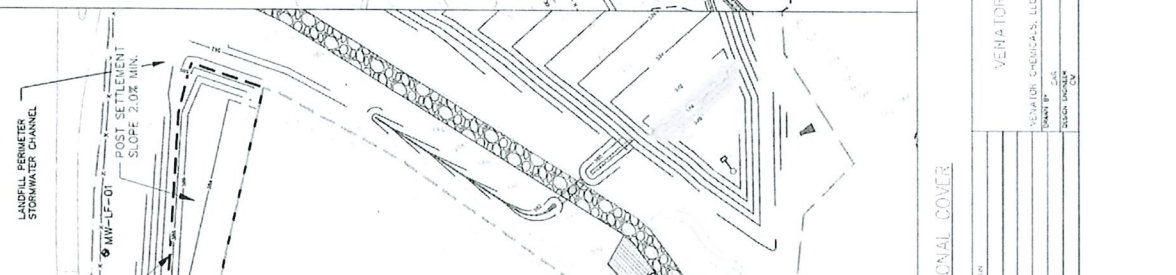
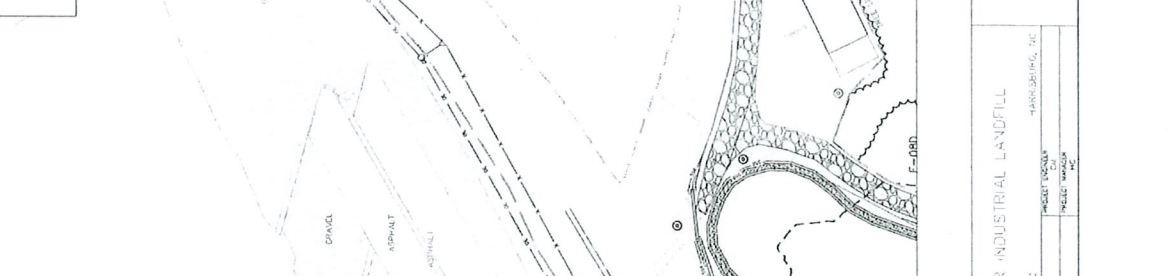
SCALE: 1" = 20'	DATE: 01/20/24	NO. 27
PROJECT NO. 24-0001	DATE: 01/20/24	REV. NO. 3
PROJECT NO. 24-0001	DATE: 01/20/24	REV. NO. 27

EXISTING TOPOGRAPHIC CONTOUR	2'-FT INTERVAL
PROPOSED LANDFILL CONTOUR	2'-FT INTERVAL
PROPOSED POWER PALE	STORMWATER CHANNEL
LIMITS OF JURISDICTION	2'-FT INTERVAL
4" x 8" DUAL CHANNEL FORECRAIN	
200-FT PROPERTY BOUNDARY	
LIMITS OF PROPOSED OVERLIE	
INDUSTRIAL LANDFILL	

SPINEL	STORMWATER CHANNEL
ASPHALT	STORMWATER CHANNEL
PROPOSED POWER PALE	STORMWATER CHANNEL
LIMITS OF JURISDICTION	2'-FT INTERVAL
4" x 8" DUAL CHANNEL FORECRAIN	
200-FT PROPERTY BOUNDARY	
LIMITS OF PROPOSED OVERLIE	
INDUSTRIAL LANDFILL	

SPINEL	STORMWATER CHANNEL
ASPHALT	STORMWATER CHANNEL
PROPOSED POWER PALE	STORMWATER CHANNEL
LIMITS OF JURISDICTION	2'-FT INTERVAL
4" x 8" DUAL CHANNEL FORECRAIN	
200-FT PROPERTY BOUNDARY	
LIMITS OF PROPOSED OVERLIE	
INDUSTRIAL LANDFILL	

SPINEL	STORMWATER CHANNEL
ASPHALT	STORMWATER CHANNEL
PROPOSED POWER PALE	STORMWATER CHANNEL
LIMITS OF JURISDICTION	2'-FT INTERVAL
4" x 8" DUAL CHANNEL FORECRAIN	
200-FT PROPERTY BOUNDARY	
LIMITS OF PROPOSED OVERLIE	
INDUSTRIAL LANDFILL	



DATE	NO.	DESCRIPTION
11/12/2011	1	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
12/12/2011	2	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
03/12/2012	3	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
05/12/2012	4	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
07/12/2012	5	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
09/12/2012	6	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
11/12/2012	7	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
01/12/2013	8	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
03/12/2013	9	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
05/12/2013	10	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
07/12/2013	11	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
09/12/2013	12	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
11/12/2013	13	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
01/12/2014	14	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
03/12/2014	15	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
05/12/2014	16	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
07/12/2014	17	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
09/12/2014	18	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
11/12/2014	19	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
01/12/2015	20	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
03/12/2015	21	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
05/12/2015	22	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
07/12/2015	23	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
09/12/2015	24	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
11/12/2015	25	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
01/12/2016	26	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
03/12/2016	27	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY
05/12/2016	28	ISSUED FOR PERMITTING - PRELIMINARY DESIGN ONLY

THIS PLAN IS FOR INFORMATION PURPOSES ONLY. DESIGN AND PERMITTING WILL BE PERFORMED IN ACCORDANCE WITH IDECON - DIVISION OF WASTE MANAGEMENT RULES AND STATUTES.

VENATOR INDUSTRIAL LANDFILL
 VENATOR CHEMICALS, LLC
 HARRISBURG, PA
 PROJECT NO. 24-00000001
 SHEET NUMBER 28

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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones
(e) Areas with slopes flatter than 4:1	14	-10 days for Falls Lake Watershed -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION
Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Rollered erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting 	<ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls Rollered erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging off-site.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

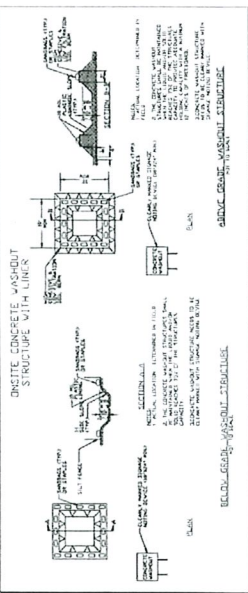
- EQUIPMENT AND VEHICLE MAINTENANCE**
- Maintain vehicles and equipment to prevent discharge of fluids.
 - Provide drip pans under any stored equipment.
 - Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
 - Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
 - Remove leaking vehicles and construction equipment from service until the problem has been corrected.
 - Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

- LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**
- Never bury or burn waste. Place litter and debris in approved waste containers.
 - Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
 - Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
 - Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
 - Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
 - Anchor all lightweight items in waste containers during times of high winds.
 - Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
 - Dispose waste off-site at an approved disposal facility.
 - On business days, clean up and dispose of waste in designated waste containers.

- PAINT AND OTHER LIQUID WASTE**
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
 - Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
 - Contain liquid wastes in a controlled area.
 - Containment must be labeled, sized and placed appropriately for the needs of site.
 - Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

- PORTABLE TOILETS**
- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
 - Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
 - Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

- EARTHEN STOCKPILE MANAGEMENT**
- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
 - Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
 - Provide stable stone access point when feasible.
 - Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



- CONCRETE WASHOUTS**
- Do not discharge concrete or cement slurry from the site.
 - Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
 - Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
 - Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
 - Do not use concrete washouts for decontaminating or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
 - Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
 - Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
 - Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
 - Remove leftovers from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
 - At the completion of the concrete work, remove remaining leftovers and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

- HERBICIDES, PESTICIDES AND RODENTICIDES**
- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
 - Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
 - Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
 - Do not stockpile these materials onsite.

- HAZARDOUS AND TOXIC WASTE**
- Create designated hazardous waste collection areas on-site.
 - Place hazardous waste containers under cover or in secondary containment.
 - Do not store hazardous chemicals, drums or bagged materials directly on the ground.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the inspection record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauges maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days; and this will determine if a site inspection is required on which no rainfall occurred shall be recorded as "none". The inspector may use another rain-measuring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event 0.5-1.0 inch in 24 hours.	1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Location of maintenance needs for the measures. 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event 0.5-1.0 inch in 24 hours.	1. Identification of the discharge outfalls inspected. 2. Name and time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of indicators of stormwater pollution such as oil slicks, debris, or visible sediment leaving the site. 5. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event 0.5-1.0 inch in 24 hours.	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, including evidence, and date of corrective action, taken, and an explanation as to the actions taken to control future releases. 2. An explanation as to the actions taken to control future releases.
(5) Stream or wetlands, onsite or offsite (non-stabilized)	At least once per 7 calendar days and within 24 hours of a rain event 0.5-1.0 inch in 24 hours.	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construct on activity, then a record of the following shall be made: 1. Name and time of the inspection. 2. Name of the person performing the inspection. 3. Regional Office per Part III, Section C, Item (2)(d) of this permit. 4. Description of the sedimentation or turbidity. 5. Description, evidence, and date of corrective actions taken.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent stabilization). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation
The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site
In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
- (b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- 3. Documentation to be Retained for Three Years**
All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41.]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported
Permittees shall report the following occurrences:

- (a) Visible sediment deposition in a stream or wetland.
- (b) Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).
- (c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- (d) Anticipated bypasses and unanticipated bypasses.
- (e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements
After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 302(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> • A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(i)(7)]	<ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(i)(6).] • Division staff may waive the requirement for a written report on a case-by-case basis.

EFFECTIVE: 04/01/19

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

PART II: SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items.
- (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit.
- (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sized, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above.
- (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- (f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

Novaflex®

Pump-Flex™

Pump-Flex™ Composite Hose

Pump-Flex™ Composite Hose replaces the heavy rubber suction and discharge hoses, commonly used in the pump rental market, that are extremely heavy and hard to maneuver and due to the small bend radius of the rubber hose, can also kink prematurely. Pump-Flex™ suction and discharge hose provides extreme flexibility, light-weight handling and excellent service life. Excellent for the transfer of petroleum, water, dirty oily water and light chemicals.

Advantages

- Crimped couplings
- Absorbs pump pulsations
- Less manpower to install than rubber hose
- Easy to package for shipping and storage
- Standard lengths 10 ft & 20 ft. with CS 150lb fixed x floating flanges.
- Flanges crimped each end.
- Other fitting combinations available.
- Maximum length 100 ft (10" = 80 ft)
- Operating Temperature -40°F to 212°F (-40°C to +100°C)
- Rated for full vacuum

(Not for use in marine dock, crude oil, bunker oil, or heavy viscous product applications. For these applications before use, consult Novaflex® Chemical Resistance Chart for chemical compatibility.)



6" x 10 ft length, background
6" x 20 ft, coiled

6" x 10 ft length

ID (INS)	4	6	8	10	12
ID (OUT)	4.4	6.75	9	11.5	13.5
Max WP PSI	200	200	200	200	150
Burst Pres PSI	800	800	800	800	800
Bend Rad. Inches	14.2	22.0	30.0	40.0	47.0
Weight LB/FT	2.7	7.0	10.0	13.0	15.5

Attention: **Never use any Novaflex® hose outside the hose temperature limits marked on the hose. It should be noted, that even within these indicated hose temperature limits other factors such as (but not limited to); attached end fittings, different hose installations can place additional stress on couplings (i.e. vertically hung) and hose diameters can impact performance under elevated temperatures. For safety reasons Novaflex® recommends that the hose working pressure should be de-rated by the following temperatures ranges: +122°F to +175°F (+50°C to +80°C); reduce working pressure by 15%. +178°F to +110°F (+81°C to +110°C); reduce working pressure by 30%. Over +230°F (+110°C); reduce working pressure by 50%.

It is impossible to test Uni-CHEM® hose under all conditions to which it might be subjected in the field. It is therefore the buyer and/or end user's responsibility to test all Uni-CHEM® hose under conditions that duplicate the service condition prior to installation. **Never use Novaflex Composite Hose above the ratings listed by Novaflex. Please Note:** It is important to advise Novaflex of the product being conveyed when ordering composite hoses. All hoses supplied have electrical continuity and are tested and certified accordingly. ***WARNING!** Elevated temperatures can change the chemical resistance rating of hose. Check the chemical resistance charts published by Novaflex® to verify that the chemical to be transferred is rated for use with the polypropylene tube at the temperature & concentrations listed.

Most chemicals become more aggressive the higher the temperature, reducing the ability of the tube material to withstand them. Compatibility information is available from Novaflex. If no data exists, it is the users responsibility to determine if the hose is compatible with the chemical to be transferred. The information provided within is for informational purposes only. We have made every effort to ensure the accuracy of the provided information and assume no responsibility for any loss or damage due to errors or omissions or to the use or misuse of any information supplied. All improvements are subject to change without prior notice. It is the buyer and/or end users' responsibility to review our complete **Terms and Conditions of Sale** located on our web sites at: www.novaflex.com / www.z-flex.com / www.flexmaster.com.

rev 10.2020

IN USA

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www.novaflex.co.uk Email: sales@novaflex.co.uk

Sewage and Trash Pump

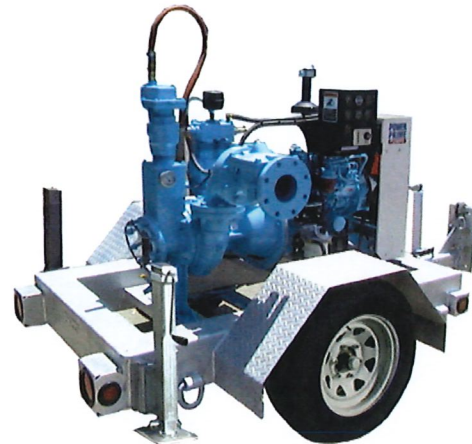
DV100

Overview:

The 4" suction x 4" discharge self-priming centrifugal DV100 trash pump provides up to a maximum of 790 gallons per minute pumping and up to 115 feet of head. This pump is usually mounted on a trailer and features the standard PowerPrime Clean Prime Venturi priming system which allows it to run continuously, unattended and even run dry.

Features:

- Continuous self-priming
- Runs dry unattended
- 12 volt, electric start with auto-start capable control panel
- Flex coupled to diesel engine
- 24-hour minimum capacity fuel tank
- Compressor fitted to operate the air-ejector priming system
- Cast iron wet end with open impellers
- Replaceable wear plates
- SAE Mounted



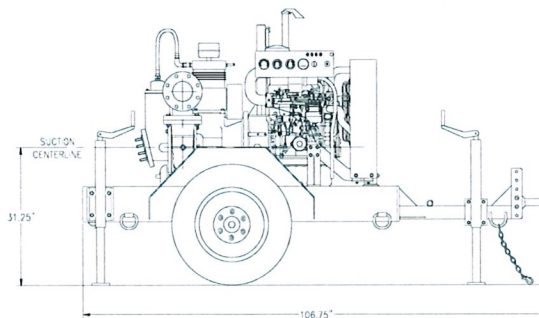
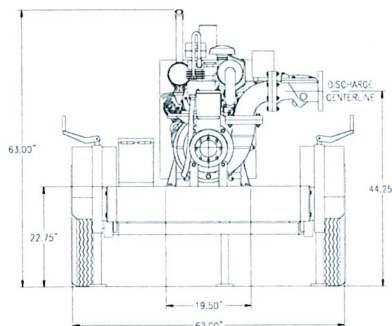
The DV100 is also available sound attenuated.

Specs:

Maximum Flow	790 GPM
Maximum Head	115 feet
Pump Size	4" x 4"
Maximum Solids Handling	1.75 inches
Dry weight	1,900 lbs.
Footprint: Trailer mounted model	106.75" x 62"
Fuel tank	40 or 60 gallon
Fuel consumption	1.2 gph @ 2,200 RPM

Accessories:

- Spillguard
- Suction and Discharge Hoses
- Fuel Nurse Tank



PUMPS • TANKS • FILTRATION • PIPE • SPILLGUARDS

Rain for Rent is a registered trademark of Western Oilfields Supply Company. Features and specifications are subject to change without notice.

Liquid Ingenuity®
800-742-7246
rainforrent.com



Rain For Rent

CURVE: 01-0133-02-05
 PUMP : DV-100

SUCTION
4"

DISCHARGE
4"

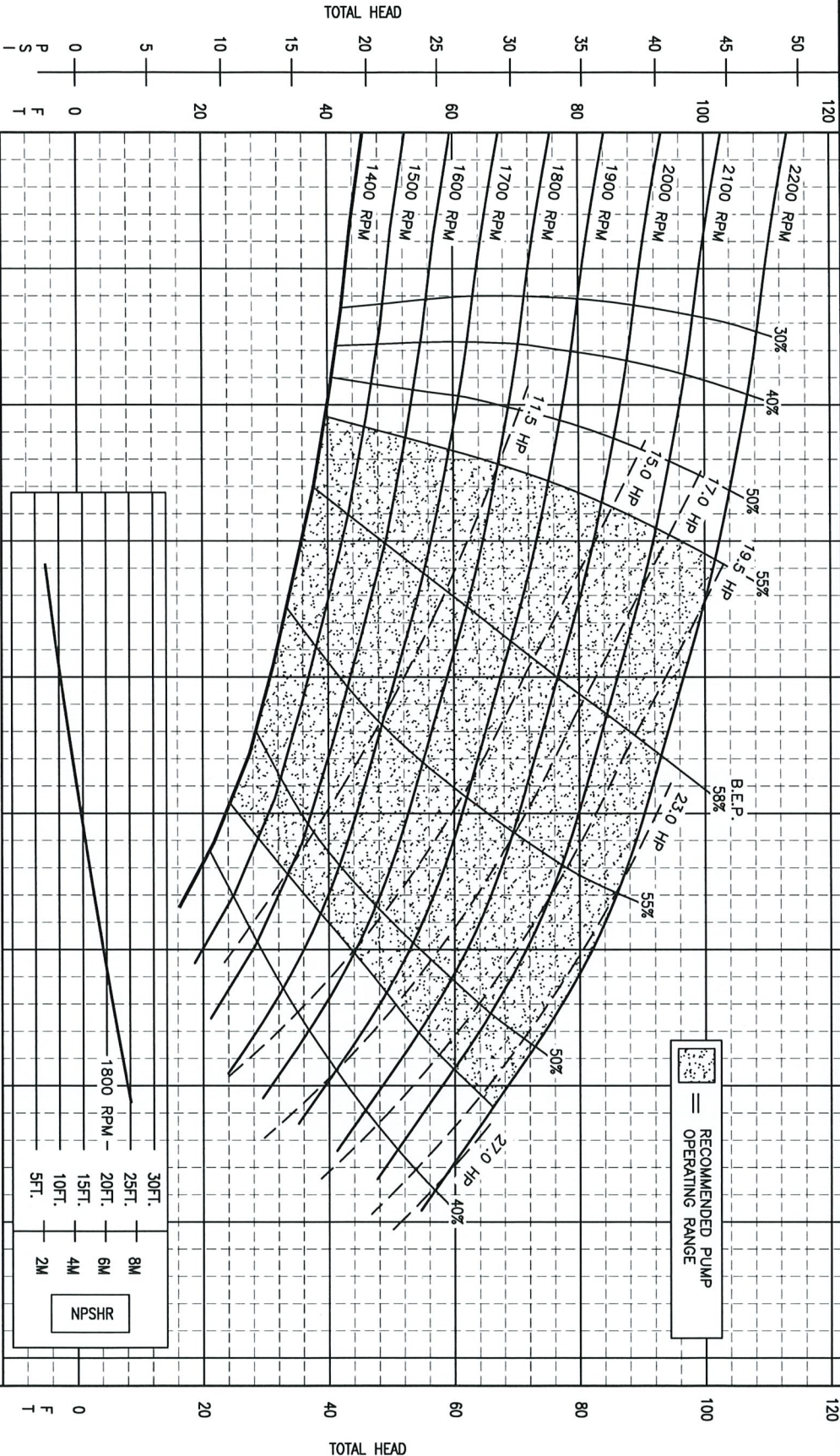
MAX. SPHERE
1.77

IMPELLER
3 VANE

IMPELLER
8.7"

IMPELLER &
WEAR RINGS
316 S/S

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FLOW - CLEAR WATER PERFORMANCE (US GPM)

CONFIDENTIAL

-PUMP PERFORMANCE CURVES DO NOT INCLUDE CHECK VALVE LOSSES

-POWER CURVES INCLUDE AIR COMPRESSOR POWER CONSUMPTION

LakeTank™

B-16

Overview:

Contain more than 668,000 gallons of water with just one tank. The LakeTank™ B-16 reduces traffic and carbon footprint on your jobsite, by replacing 32 traditional 500 BBL frac tanks and minimizes manifolding time.

Features:

- Specially designed panel handling system for safe, rapid deployment
- Two OSHA compliant access/egress ladders
- One stairway observation platform
- Four 4" fill lines, Three 4" circulation lines
- One 12" low suction line for high volume pumping applications
- Heavy duty connecting plates and pins for safe reliable containment
- Six temporary panel supports to ensure safety during installation
- No easy access to the liner from outside the tank
- Standard liner is 40mil LLDPE
- Standard underlayment is 100Z Geotextile Ground Pad
- Reduced transportation costs: Complete tank structure is delivered on three trucks (6 truck trips vs. 64 for conventional 500bbl frac tanks)
- Reduced labor costs during manifolding and operation
- Reduced heating costs
- Reduced site preparation costs (smaller footprint compared to 500bbl frac tanks)

Specs:

Structure Diameter	100 ft.
Working Clearance	160' x 175' ft.
Capacity with 8" free board	16,000 BBL
Number of Panels	12
Number of Trucks to transport	3
Size of each Panel	12' x 26.7'
Panel Weight (w/o insulation)	6,549 lb.
Liner Diameter	144 ft. Diameter
Liner Weight = 0.21 lb./sq. ft.	3,420 lb.



Accessories:

- FreezeSentry™ Heating equipment
- Tank Sidewall Insulation
- Floating Insulated Covers
- Bird Netting
- Filtration Equipment
- Temperature and Level Indicators/Alarms/Telemetry
- Various Liner Materials & Thicknesses
- Additional Suction or Fill Lines



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800-742-7246
rainforrent.com

Temporary Tank Overview & Safety Features

Two temporary tanks will serve as the settling and holding area for liquids during the lagoon #5 refurbishment process in order to dry and remediate the existing sediment layer. The temporary tanks will provide 1.25 million gallons of storage with approximately 627K gallons of storage each. The tanks are approximately 100' in diameter and 12' high. The piping system will allow for the isolation of a single tank while the other continues to operate should the need arise (i.e. a quality or maintenance issue). The tanks will take approximately 6-8 weeks to install and will only be in service for 6-8 months during the lagoon 5 reconfiguration. All disturbed areas will be seeded for stabilization with vegetation after installation and again after tank removal.

The tank design and proposed operations provide a variety of engineering and administrative controls for environmental and personnel safety.

- Tank sizing and design allows for reserve capacity in cases of average and max flow.
- Tanks will be installed by certified contractor according to their written procedures and specifications in "Lake Tank Installation Manual".
- Tank material of construction is compatible with wastewater being managed.
- The tanks will be located within an earthen berm that will provide 200,000 gallons of secondary containment.
- Tank footprint falls within NCDEQ approved Sediment and Erosion Control Plan to minimize any stormwater issues
- Two tanks for redundancy in case of emergency or stormwater surge.
- Tank level can be verified visually. Tanks will be equipped with level indication that alarms at a local NEMA 4 control panel. Upon high level, the controller will automatically dial multiple operators (cell phones) in the event of high level so that corrective actions can be initiated.
- The facility has a lined lagoon which is a permitted component of the NPDES treatment system which could be used for water storage in the event of an emergency. The lined lagoon has a capacity of 350,000 gallons.
- The temporary tanks will be operated by licensed NC Water Pollution Control System Operators for Physical Chemical (PC)2 and their respective PC1 back up. These are Operators of Response Charge as required by the Site's NPDES operating permit.
- The facility has developed written operating procedures for the use of the temporary tanks that include the following controls:
 - Use of checklists for valve configurations.
 - A daily inspection of the temporary tank system.
 - The maintenance of tank levels at half volume so that any surges, upsets or emergencies can be managed.
 - Freeze protection plans
- Site maintains a comprehensive Contingency and Emergency Response Plan and can utilize off site contractors in the event of an emergency that cannot be managed by Site personnel.

Technical Specifications for the Equipment

Tank site will be prepared with 3500 cubic yards of soil from the borrow area to ensure a stable base for the tanks.

- Tank consists of steel panels that are 12 ft high x 26.7 ft long and weighing 6549 lbs. Also, the design includes heavy duty connecting plates and pins for reliable containment and 2 OSHA compliant access/egress ladders.
- Dual liner system to include a geo textile ground pad and a 40 mil LLDPE liner
- Tanks will be provided with level indication with auto dialer alarms to alert operation via phone.
- Chemical transfer hoses used for inlet and outlet temporary tank piping are durable multi-layer chemical hose construction that are compatible with material being transferred. Most of the hose connections will be within the earthen berm for secondary containment.
- 4 X 4 self-priming 700 gpm diesel driven centrifugal pump



ERM

ERM
300 W Summit Ave
Suite 330
Charlotte, NC 28203

T 704-541-8345

erm.com

Venator Chemicals, LLC
Jonna Stein
5910 Pharr Mill Rd
Address 2
Harrisburg, NC, 28075

DATE
22 February, 2024

SUBJECT
2017 Lagoon 5 Sediment Sampling

Dear Ms. Stein:

As requested, ERM NC, Inc. (ERM) has prepared the following summary and context of the 2017 sediment sampling activities at Lagoon 5 performed by Brown and Caldwell, as presented in their report entitled *Annual Hazardous Waste Management Compliance Groundwater Monitoring Report for 2017*.

The sediments in Lagoon 5 are characterized as non-hazardous waste and are settled solids from Venator's wastewater treatment process. The wastewater treatment process supports the production of inorganic nitrates such as calcium nitrate, magnesium nitrate, sodium nitrate, zinc nitrate, copper nitrate, lithium nitrate and manganese nitrate. Pesticide production is in a separate part of the plant and pesticides are not introduced into the wastewater treatment system. The solids within the lagoon are primarily metal hydroxides like calcium hydroxide (hydrated lime, agricultural lime) and magnesium hydroxide (also known as milk of magnesia) and other metal hydroxides like zinc, manganese, sodium, copper and aluminum.

The sediments were sampled by independent outside contractors in 1997 by Chalam Pakala Engineering, and again by Brown and Caldwell in December of 2017 to confirm the results of the previous study by Chalam Pakala Engineering. The sampling was designed to gather data for the ongoing evaluation of remediation options for Lagoon 5 (sediment volume and nature).

Based on Brown and Caldwell's report, the 2017 sludge sampling methods and means were in accordance with EPA Region 4 Science and Ecosystem Support Division's (SESD's) Operating Procedure for Waste Sampling, dated December 16, 2016.

The lagoon sediment sampling approach involved establishing a grid and employing random sample locations within each specified grid cell and then creating one composite sample per grid. Nine grid cells were established to segregate the composite borings. Within each of the nine grid cells, six boring locations were randomly selected



and sludge aliquots were collected, three in the shallow sludge (0-6 feet below the top of the sludge (bts) and three in deeper sludge (6ft bts – the bottom of the lagoon). Also at each boring location, sludge thickness was determined by advancing a solid probe through the sludge until refusal (bottom of the lagoon). The average thickness of the sludge in each grid cell ranged from approximately 8 feet to 15 feet. Generally, the sludge was thickest in the northeast portion of lagoon 5, with less sludge measured in the southwest portion of Lagoon 5. A total volume of approximately 72,900 cubic yards was calculated.

Within each grid, the three shallow sample aliquots and the three deep sample aliquots were combined to form one shallow and one deep composite sludge sample per grid cell. In all, 27 shallow sludge samples aliquots and 27 deep sludge sample aliquots were collected (54 sample aliquots in all). This resulted in nine shallow and nine deep composite samples collected for analysis. The samples were analyzed by Pace Laboratories Inc. for the parameters listed on the table below. A copy of the laboratory analytical data sheets are attached herein.

Sediment Analytical Parameters	Analytical Method
TCLP Metals	SW 6010 TCLP
TCLP Pesticides	SW 8081 TCLP
TCLP Herbicides	SW 8151 TCLP
Ignitability (Flashpoint)	SW 1010
pH	SW 9045
Anions	SW 9045
Reactive Cyanide	SW 9014
Reactive Sulfide	A4500S2F
Sulfate	SW90566A
Chloride	SW90566A
Nitrate	E353.2
Nitrite	E353.2
Volatile Organic Compounds	SW8260
Total Metals	SW 6010

* TCLP = Toxic Characteristic Leaching Procedure

Based on the attached analytical results, the sediment is characterized as non-hazardous as defined in 40 CFR Part 261 Subpart C. The sediments do not exhibit the characteristic of toxicity, which is determined by the Toxicity Characteristic Leaching

Procedure (TCLP). The TCLP is the EPA's procedure designed to simulate landfill conditions, predicting what and how much of certain constituents will leach out of a given material. Materials that fail the TCLP analyses are considered an EPA hazardous waste. Materials that pass the TCLP analyses are considered non-hazardous and are not regulated under 40 CFR Part 261 Subpart C. In addition to not exhibiting toxicity, based on laboratory analytical results, the sediments did not exhibit ignitability, corrosivity, or reactivity. Based on the analytical results, the sediments are characterized as non-hazardous according to EPA's regulations. A summary of the results is presented as follows:

- The lagoon 5 sediment did not exceed The TCLP limits for metals.
- No pesticides or herbicides were detected in the lagoon 5 sediment.
- Magnesium (9.56% on average), Zinc (6.34% on average) , Calcium (6.27% on average), Manganese (2.67% on average), Nitrate (<1%), Nitrite (<1%) and Chloride (<1%) were observed in total concentration analysis and are consistent with operations and the wastewater treatment process of the site. By definition, none of these constituents are characterized as hazardous waste according to EPA.
- A pH of approximately 9.0-10.0 was measured for the majority of the composite samples with one outlier at 12.1. None of these measured pH values were within EPA's range of corrosive hazardous waste (i.e., pH greater than or equal to 12.5, or less than or equal to 2).
- Nineteen sediment samples were tested for total concentration for over 60 volatile organic compounds. All were below the laboratory reporting limit except for grid 1 upper and lower samples which detected 144 ug/kg and 138 ug/kg (parts per billion) benzene, respectively. The site does not use benzene in its manufacturing or maintenance process.
- Low concentrations of benzene (144 ug/kg (parts per billion) and 138 ug/kg) were detected in total concentration analysis in one grid cell, and several metals were also detected in total concentration analysis. However, in all cases the TCLP analytical results for benzene and metals were below EPA thresholds for hazardous characterization.



DATE
22 February, 2024

Based on the analytical results, the sludge was found to be non-hazardous throughout lagoon 5. A summary of the sludge analytical data is provided in the attached Table 6 from the Brown and Caldwell's sampling report. The composite sample aliquot locations and grid layout are provided in the attached Figure 3 from Brown and Caldwell's sampling report.

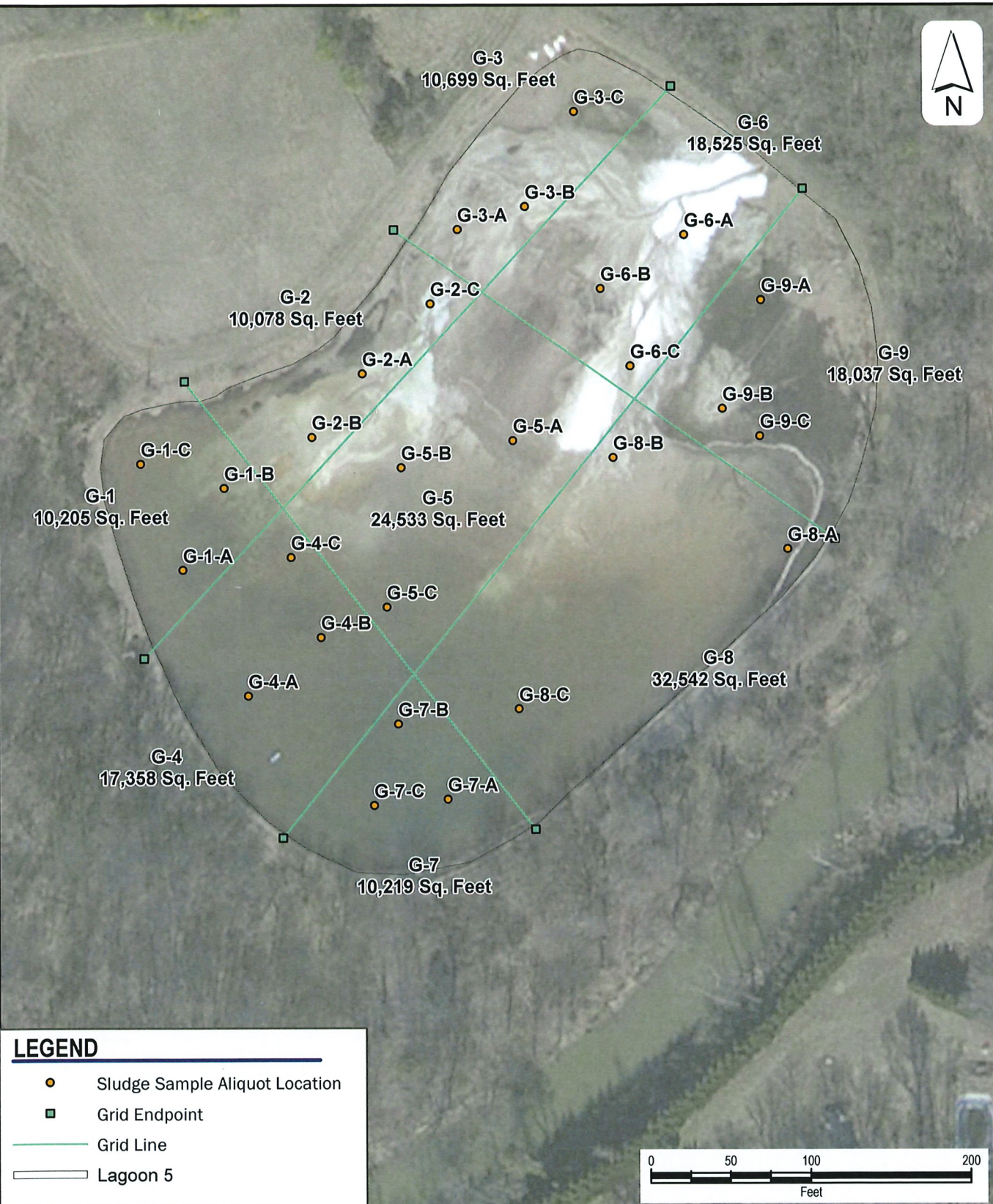
If you have any questions regarding this information, please contact me or Rick Tarravechia at 704-541-8345.

Regards,


Harry Carter, P.G.
Project Manager

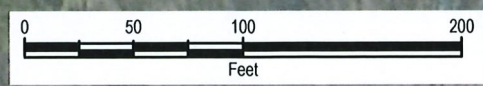
cc: Rick Tarravechia, ERM

Attachments:
Figure 3 – Lagoon 5 Characterization Sample Locations
Table 6 – Sludge Analytical results
Laboratory Reports – Pace Analytical



LEGEND

- Sludge Sample Aliquot Location
- Grid Endpoint
- Grid Line
- ▭ Lagoon 5



Brown AND Caldwell

PREPARED FOR:
Chemical Specialties, LLC.

DATE: 12/12/2017
SCALE: AS SHOWN
DRAWN BY: GTG
CHECKED BY: XXX
PROJECT #: 150791

Figure 3
Lagoon 5 Characterization
Sample Locations

5910 Pharr Mill Road
Harrisburg, North Carolina

Analytical Method	Chemical		G-7-U	G-8-L	G-8-U	G-9-L	G-9-U
			12/7/2017	12/6/2017	12/6/2017	12/5/2017	12/5/2017
Metals - SW6010	Arsenic	n	1,610	847	540	300	648
	Barium	n	< 266	< 283	169	182	66.5
	Cadmium	n	< 53.3	93.6	68.7	9.2	52.5
	Calcium	n	84,800	54,700	69,600	55,400	126,000
	Chromium	n	< 266	< 283	195	91.1	237
	Cobalt	n	< 266	< 283	< 123	13	7.3
	Lead	n	< 266	< 283	< 123	24.9	544
	Magnesium	n	82,300	148,000	112,000	75,200	117,000
	Manganese	n	57,000	14,400	22,800	6,470	10,700
	Selenium	n	< 533	< 565	< 246	< 2.3	< 4.0
	Silver	n	< 266	< 283	< 123	< 1.2	2.9
	Sodium	n	< 266000	< 283000	< 123000	1,790	2,610
	Zinc	n	97,800	76,500	52,000	22,100	50,000
Mercury - SW7471	Mercury	n	0.16	0.057	0.13	0.97	0.083
TCLP Metals - SW6010	Arsenic	n	< 0.050	< 0.050	0.061	< 0.050	< 0.050
	Barium	n	< 0.25	0.34	0.41	< 0.25	0.45
	Cadmium	n	0.078	0.2	< 0.0050	< 0.0050	0.4
	Chromium	n	0.078	0.08	< 0.050	< 0.050	< 0.050
	Lead	n	0.078	0.055	< 0.025	0.03	0.059
	Selenium	n	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
	Silver	n	0.025 UJ	0.025 UJ	0.025 UJ	< 0.025	< 0.025
TCLP Mercury - SW7470	Mercury	n	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
TCLP Pesticides - SW8081	BHC, gamma (Lindane)	n	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	Chlordane (technical)	n	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
	Endrin	n	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	Heptachlor	n	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	Heptachlor epoxide	n	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	Methoxychlor	n	< 1000	< 1000	< 1000	< 1000	< 1000
	Toxaphene	n	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TCLP Herbicides - SW8151	2,4-D	n	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silvex (2,4,5-TP)	n	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Reactive Cyanide - SW9014	Cyanide, Reactive	n	< 6.4	< 5.7	< 4.6	< 3.8	< 5.3
pH - SW9045	pH	n	8.6 J	9.2	9.2	12.1	10
Anions - SW9056A	Chloride	n	1,250	1,360	768	459	1,510
	Sulfate	n	< 320	< 288	< 231	< 191	326
Reactive Sulfide - A4500S2F	Sulfide, Reactive	n	< 63.9	< 57.2	< 46.1	< 38.1	< 53.0
Nitrogen - E353.2	Nitrate (as N)	n	13,000	10,000	7080 J	3,810	8,940
	Nitrite (as N)	n	485	573	401 J	191	646
Flashpoint - SW1010	Flash point	n	> 200	> 200	> 200	> 200	> 200

Analytical Method	Chemical						
		017	G-7-U 12/7/2017	G-8-L 12/6/2017	G-8-U 12/6/2017	G-9-L 12/5/2017	G-9-U 12/5/2017
VOCs - SW8260	1,1,1,2-Tetrachloroethane	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,1,1-Trichloroethane	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,1,2,2-Tetrachloroethane	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,1,2-Trichloroethane	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,1-Dichloroethane	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,1-Dichloroethene	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,1-Dichloropropene	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,2,3-Trichlorobenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2,3-Trichloropropane	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2,4-Trichlorobenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2,4-Trimethylbenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2-Dibromo-3-chloropropane (DBCP)	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2-Dibromoethane (EDB)	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2-Dichlorobenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2-Dichloroethane	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,2-Dichloropropane	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,2-Dimethylbenzene (o-Xylene)	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,3,5-Trimethylbenzene (mesitylene)	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,3-Dichlorobenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,3-Dichloropropane	0	< 32.0	< 28.8	< 23.1	NA	NA
	1,4-Dichlorobenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	2,2-Dichloropropane	0	< 32.0	< 28.8	< 23.1	NA	NA
	2-Butanone (MEK)	0	< 639	< 577	< 463	NA	NA
	2-Chlorotoluene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	2-Hexanone	0	< 320	< 288	< 231	NA	NA
	4-Chlorotoluene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	4-Isopropyltoluene (p-Cymene)	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	4-Methyl-2-pentanone (MIBK)	0	< 320	< 288	< 231	NA	NA
	Acetone	0	< 639	< 577	< 463	NA	NA
	Benzene	0	< 32.0	< 28.8	< 23.1	NA	NA
	Bromobenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	Bromochloromethane	0	< 32.0	< 28.8	< 23.1	NA	NA
	Bromodichloromethane	0	< 32.0	< 28.8	< 23.1	NA	NA
	Bromoform	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	Bromomethane	0	< 63.9	< 57.7	< 46.3	NA	NA
	Carbon tetrachloride	0	< 32.0	< 28.8	< 23.1	NA	NA
	Chlorobenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA
	Chloroethane	0	< 63.9	< 57.7	< 46.3	NA	NA
	Chloroform	0	< 32.0	< 28.8	< 23.1	NA	NA
	Chloromethane	0	< 63.9	< 57.7	< 46.3	NA	NA
cis-1,2-Dichloroethene	0	< 32.0	28.8 UJ	< 23.1	NA	NA	
cis-1,3-Dichloropropene	0	< 32.0	28.8 UJ	< 23.1	NA	NA	
Dibromochloromethane	0	< 32.0	28.8 UJ	< 23.1	NA	NA	
Dibromomethane	0	< 32.0	28.8 UJ	< 23.1	NA	NA	
Dichlorodifluoromethane (Freon 12)	0	< 63.9	< 57.7	< 46.3	NA	NA	
Diisopropyl ether (DIPE)	0	< 32.0	< 28.8	< 23.1	NA	NA	
Ethylbenzene	0	< 32.0	28.8 UJ	< 23.1	NA	NA	
Hexachlorobutadiene	0	< 32.0	28.8 UJ	< 23.1	NA	NA	
Isopropylbenzene (Cumene)	0	< 32.0	28.8 UJ	< 23.1	NA	NA	
Methylene chloride	0	< 128	< 115	< 92.6	NA	NA	
Napthalene	0	< 32.0	28.8 UJ	< 23.1	NA	NA	

Analytical Method	Chemical	017	G-7-U	G-8-L	G-8-U	G-9-L	G-9-U
			12/7/2017	12/6/2017	12/6/2017	12/5/2017	12/5/2017
VOCs - SW8260 (continued)	n-Butylbenzene	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	n-Propylbenzene	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	sec-Butylbenzene	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	Styrene	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	tert-Butyl methyl ether (MTBE)	U	< 32.0	< 28.8	< 23.1	NA	NA
	tert-Butylbenzene	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	Tetrachloroethene (PCE)	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	Toluene	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	trans-1,2-Dichloroethene	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	trans-1,3-Dichloropropene	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	Trichloroethene (TCE)	U	< 32.0	< 28.8	< 23.1	NA	NA
	Trichlorofluoromethane (Freon 11)	U	< 32.0	< 28.8	< 23.1	NA	NA
	Vinyl acetate	U	< 32.0	28.8 UJ	< 23.1	NA	NA
	Vinyl chloride	U	< 63.9	< 57.7	< 46.3	NA	NA
Xylenes, m & p	U	< 63.9	57.7 UJ	< 46.3	NA	NA	
Xylenes, total	U	< 63.9	57.7 UJ	< 46.3	NA	NA	
Percent Moisture - ASTM D2974-87	Percent Moisture		84.4	82.7	78.4	73.8	81.2

Notes:

µg/kg - micrograms per kilogram.

< - less than laboratory reporting limit.

DEG F - degrees Fahrenheit.

ID - identification.

mg/kg - milligrams per kilogram.

mg/L - milligrams per liter.

NA - not analyzed.

SU - standard pH units.

TCLP - toxicity characteristic leaching procedure.

VOCs - volatile organic compounds.



Pace Analytical Services, LLC
9800 Kinsey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

December 26, 2017

Angela Baker
Chemical Specialties Inc.
5910 Pharr Mill Rd
Harrisburg, NC 28075

RE: Project: LAGOON SAMPLING
Pace Project No.: 92365955

Dear Angela Baker:

Enclosed are the analytical results for sample(s) received by the laboratory on December 06, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Dan McCloy, Brown & Caldwell
Ms. Jonna Stein, Chemical Specialties Inc.



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Page 1 of 45



CERTIFICATIONS

Project: LAGOON SAMPLING
Pace Project No.: 92365955

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074

Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Charlotte Certification IDs

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LAGOON SAMPLING
Pace Project No.: 92365955

Charlotte Certification IDs

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84

Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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SAMPLE ANALYTE COUNT

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory		
92365955001	G-2-U	EPA 8081	PKS	9	PASI-C		
		EPA 8151	LJM	3	PASI-O		
		EPA 6010	SER	13	PASI-A		
		EPA 6010	SH1	7	PASI-A		
		EPA 7470	WAB	1	PASI-A		
		EPA 7471	WAB	1	PASI-A		
		ASTM D2974-87	KDF	1	PASI-C		
		EPA 1010	ECH	1	PASI-A		
		EPA 9045	KDF1	1	PASI-A		
		EPA 353.2	CJH1	2	PASI-A		
		EPA 9014	PAS	1	PASI-PA		
		SM4500S2F-00	PAS	1	PASI-PA		
		EPA 9056A	CDC	2	PASI-A		
		92365955002	G-2-L	EPA 8081	PKS	9	PASI-C
				EPA 8151	LJM	3	PASI-O
EPA 6010	SER			13	PASI-A		
EPA 6010	SH1			7	PASI-A		
EPA 7470	WAB			1	PASI-A		
EPA 7471	WAB			1	PASI-A		
ASTM D2974-87	KDF			1	PASI-C		
EPA 1010	KMM			1	PASI-A		
EPA 9045	KDF1			1	PASI-A		
EPA 353.2	CJH1			2	PASI-A		
EPA 9014	PAS			1	PASI-PA		
SM4500S2F-00	PAS			1	PASI-PA		
EPA 9056A	CDC			2	PASI-A		
92365955003	G-3-U			EPA 8081	PKS	9	PASI-C
				EPA 8151	LJM	3	PASI-O
		EPA 6010	SER	13	PASI-A		
		EPA 6010	SH1	7	PASI-A		
		EPA 7470	WAB	1	PASI-A		
		EPA 7471	WAB	1	PASI-A		
		ASTM D2974-87	KDF	1	PASI-C		
		EPA 1010	KMM	1	PASI-A		
		EPA 9045	KDF1	1	PASI-A		
		EPA 353.2	CJH1	2	PASI-A		
		EPA 9014	PAS	1	PASI-PA		

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SAMPLE ANALYTE COUNT

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92365955004	G-3-L	SM4500S2F-00	PAS	1	PASI-PA
		EPA 9056A	CDC	2	PASI-A
		EPA 8081	PKS	9	PASI-C
		EPA 8151	LJM	3	PASI-O
		EPA 6010	SER	13	PASI-A
		EPA 6010	SH1	7	PASI-A
		EPA 7470	WAB	1	PASI-A
		EPA 7471	WAB	1	PASI-A
		ASTM D2974-87	KDF	1	PASI-C
		EPA 1010	KMM	1	PASI-A
		EPA 9045	KDF1	1	PASI-A
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA
92365955005	G-6-U	EPA 9056A	CDC	2	PASI-A
		EPA 8081	PKS	9	PASI-C
		EPA 8151	LJM	3	PASI-O
		EPA 6010	SER	13	PASI-A
		EPA 6010	SH1	7	PASI-A
		EPA 7470	WAB	1	PASI-A
		EPA 7471	WAB	1	PASI-A
		ASTM D2974-87	KDF	1	PASI-C
		EPA 1010	KMM	1	PASI-A
		EPA 9045	KDF1	1	PASI-A
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA
		92365955006	G-6-L	EPA 9056A	CDC
EPA 8081	PKS			9	PASI-C
EPA 8151	LJM			3	PASI-O
EPA 6010	SER			13	PASI-A
EPA 6010	SH1			7	PASI-A
EPA 7470	WAB			1	PASI-A
EPA 7471	WAB			1	PASI-A
ASTM D2974-87	KDF			1	PASI-C
EPA 1010	KMM			1	PASI-A
EPA 9045	KDF1			1	PASI-A

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SAMPLE ANALYTE COUNT

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92365955007	G-9-U	EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA
		EPA 9056A	CDC	2	PASI-A
		EPA 8081	PKS	9	PASI-C
		EPA 8151	LJM	3	PASI-O
		EPA 6010	SER	13	PASI-A
		EPA 6010	SH1	7	PASI-A
		EPA 7470	WAB	1	PASI-A
		EPA 7471	WAB	1	PASI-A
		ASTM D2974-87	KDF	1	PASI-C
		EPA 1010	KMM	1	PASI-A
		EPA 9045	KDF1	1	PASI-A
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		92365955008	G-9-L	SM4500S2F-00	PAS
EPA 9056A	CDC			2	PASI-A
EPA 8081	PKS			9	PASI-C
EPA 8151	LJM			3	PASI-O
EPA 6010	SER			13	PASI-A
EPA 6010	SH1			7	PASI-A
EPA 7470	WAB			1	PASI-A
EPA 7471	WAB			1	PASI-A
ASTM D2974-87	KDF			1	PASI-C
EPA 1010	KMM			1	PASI-A
EPA 9045	KDF1			1	PASI-A
EPA 353.2	CJH1			2	PASI-A
EPA 9014	PAS			1	PASI-PA
SM4500S2F-00	PAS			1	PASI-PA
EPA 9056A	CDC			2	PASI-A

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-2-U Lab ID: 92365955001 Collected: 12/05/17 12:00 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/14/17 13:00								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 15:22	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 15:22	57-74-9	
Endrin	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 15:22	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 15:22	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 15:22	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/15/17 14:03	12/16/17 15:22	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 15:22	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	50	%	10-138	1	12/15/17 14:03	12/16/17 15:22	2051-24-3	
Tetrachloro-m-xylene (S)	63	%	10-110	1	12/15/17 14:03	12/16/17 15:22	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 05:50	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 05:50	93-72-1	
Surrogates								
2,4-DCAA (S)	59	%	39-139	1	12/20/17 09:53	12/21/17 05:50	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	679	mg/kg	3.3	1	12/12/17 11:25	12/17/17 16:10	7440-38-2	
Barium	131	mg/kg	1.6	1	12/12/17 11:25	12/17/17 16:10	7440-39-3	
Cadmium	10.5	mg/kg	0.33	1	12/12/17 11:25	12/17/17 16:10	7440-43-9	
Calcium	46800	mg/kg	32.7	1	12/12/17 11:25	12/17/17 16:10	7440-70-2	E
Chromium	598	mg/kg	1.6	1	12/12/17 11:25	12/17/17 16:10	7440-47-3	
Cobalt	21.8	mg/kg	1.6	1	12/12/17 11:25	12/17/17 16:10	7440-48-4	
Lead	43.2	mg/kg	1.6	1	12/12/17 11:25	12/17/17 16:10	7439-92-1	
Magnesium	101000	mg/kg	32.7	1	12/12/17 11:25	12/17/17 16:10	7439-95-4	E
Manganese	14400	mg/kg	1.6	1	12/12/17 11:25	12/17/17 16:10	7439-96-5	E
Selenium	ND	mg/kg	3.3	1	12/12/17 11:25	12/17/17 16:10	7782-49-2	
Silver	2.1	mg/kg	1.6	1	12/12/17 11:25	12/17/17 16:10	7440-22-4	
Sodium	1920	mg/kg	1630	1	12/12/17 11:25	12/17/17 16:10	7440-23-5	
Zinc	30500	mg/kg	3.3	1	12/12/17 11:25	12/17/17 16:10	7440-66-6	E,P8
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.45; Final pH: 5.5								
Arsenic	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:09	7440-38-2	
Barium	ND	mg/L	0.25	1	12/15/17 23:55	12/18/17 19:09	7440-39-3	
Cadmium	ND	mg/L	0.0050	1	12/15/17 23:55	12/18/17 19:09	7440-43-9	
Chromium	0.088	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:09	7440-47-3	
Lead	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:09	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/15/17 23:55	12/18/17 19:09	7782-49-2	
Silver	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:09	7440-22-4	
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.45; Final pH: 5.5								
Mercury	ND	mg/L	0.00020	1	12/15/17 22:55	12/18/17 12:22	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-2-U Lab ID: 92365955001 Collected: 12/05/17 12:00 Received: 12/06/17 17:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.27	mg/kg	0.026	1	12/13/17 16:34	12/14/17 17:53	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	79.6	%	0.10	1		12/07/17 11:31		
1010 Flashpoint,Closed Cup Analytical Method: EPA 1010								
Flashpoint	>200	deg F	70.0	1		12/07/17 11:35		
9045 pH Soil Analytical Method: EPA 9045								
pH at 25 Degrees C	9.4	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3 Analytical Method: EPA 353.2								
Nitrogen, Nitrate	2580	mg/kg	474	50		12/14/17 02:46		M6
Nitrogen, Nitrite	ND	mg/kg	237	50		12/14/17 02:46		M1
733C S Reactive Cyanide Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2								
Cyanide, Reactive	ND	mg/kg	4.9	1	12/12/17 12:50	12/13/17 02:38		
734S Reactive Sulfide Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	48.6	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days Analytical Method: EPA 9056A								
Chloride	567	mg/kg	245	1		12/17/17 17:41	16887-00-6	
Sulfate	ND	mg/kg	245	1		12/17/17 17:41	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-2-L Lab ID: 92365955002 Collected: 12/05/17 12:00 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/14/17 13:00								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 15:58	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 15:58	57-74-9	
Endrin	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 15:58	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 15:58	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 15:58	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/15/17 14:03	12/16/17 15:58	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 15:58	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	49	%	10-138	1	12/15/17 14:03	12/16/17 15:58	2051-24-3	
Tetrachloro-m-xylene (S)	85	%	10-110	1	12/15/17 14:03	12/16/17 15:58	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 22:40	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 22:40	93-72-1	
Surrogates								
2,4-DCAA (S)	103	%	39-139	1	12/20/17 09:53	12/21/17 22:40	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	1100	mg/kg	6.2	1	12/12/17 11:25	12/17/17 16:27	7440-38-2	
Barium	165	mg/kg	3.1	1	12/12/17 11:25	12/17/17 16:27	7440-39-3	
Cadmium	90.2	mg/kg	0.62	1	12/12/17 11:25	12/17/17 16:27	7440-43-9	
Calcium	54700	mg/kg	62.4	1	12/12/17 11:25	12/17/17 16:27	7440-70-2	
Chromium	518	mg/kg	3.1	1	12/12/17 11:25	12/17/17 16:27	7440-47-3	
Cobalt	15.5	mg/kg	3.1	1	12/12/17 11:25	12/17/17 16:27	7440-48-4	
Lead	1040	mg/kg	3.1	1	12/12/17 11:25	12/17/17 16:27	7439-92-1	
Magnesium	101000	mg/kg	62.4	1	12/12/17 11:25	12/17/17 16:27	7439-95-4	E
Manganese	12400	mg/kg	3.1	1	12/12/17 11:25	12/17/17 16:27	7439-96-5	E
Selenium	ND	mg/kg	6.2	1	12/12/17 11:25	12/17/17 16:27	7782-49-2	
Silver	3.3	mg/kg	3.1	1	12/12/17 11:25	12/17/17 16:27	7440-22-4	
Sodium	ND	mg/kg	3120	1	12/12/17 11:25	12/17/17 16:27	7440-23-5	
Zinc	74000	mg/kg	6.2	1	12/12/17 11:25	12/17/17 16:27	7440-66-6	E,P8
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.66; Final pH: 5.5								
Arsenic	0.064	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:20	7440-38-2	
Barium	0.54	mg/L	0.25	1	12/15/17 23:55	12/18/17 19:20	7440-39-3	
Cadmium	0.54	mg/L	0.0050	1	12/15/17 23:55	12/18/17 19:20	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:20	7440-47-3	
Lead	0.098	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:20	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/15/17 23:55	12/18/17 19:20	7782-49-2	
Silver	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:20	7440-22-4	
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.66; Final pH: 5.5								
Mercury	ND	mg/L	0.00020	1	12/15/17 22:55	12/18/17 12:25	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-2-L Lab ID: 92365955002 Collected: 12/05/17 12:00 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.27	mg/kg	0.030	1	12/13/17 16:34	12/14/17 17:55	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	84.0	%	0.10	1		12/07/17 11:31		
1010 Flashpoint,Closed Cup Analytical Method: EPA 1010								
Flashpoint	> 200.0	deg F	70.0	1		12/07/17 21:39		
9045 pH Soil Analytical Method: EPA 9045								
pH at 25 Degrees C	9.0	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3 Analytical Method: EPA 353.2								
Nitrogen, Nitrate	2740	mg/kg	615	50		12/14/17 02:51		
Nitrogen, Nitrite	ND	mg/kg	307	50		12/14/17 02:51		
733C S Reactive Cyanide Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2								
Cyanide, Reactive	ND	mg/kg	6.2	1	12/12/17 12:50	12/13/17 02:39		
734S Reactive Sulfide Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	62.2	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days Analytical Method: EPA 9056A								
Chloride	1120	mg/kg	312	1		12/17/17 18:32	16887-00-6	
Sulfate	ND	mg/kg	312	1		12/17/17 18:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-3-U Lab ID: 92365955003 Collected: 12/05/17 16:00 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/14/17 13:00								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 16:33	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 16:33	57-74-9	
Endrin	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 16:33	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 16:33	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 16:33	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/15/17 14:03	12/16/17 16:33	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 16:33	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	59	%	10-138	1	12/15/17 14:03	12/16/17 16:33	2051-24-3	
Tetrachloro-m-xylene (S)	81	%	10-110	1	12/15/17 14:03	12/16/17 16:33	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 23:04	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 23:04	93-72-1	
Surrogates								
2,4-DCAA (S)	108	%	39-139	1	12/20/17 09:53	12/21/17 23:04	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	666	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:31	7440-38-2	
Barium	98.0	mg/kg	1.1	1	12/12/17 11:25	12/17/17 16:31	7440-39-3	
Cadmium	16.2	mg/kg	0.23	1	12/12/17 11:25	12/17/17 16:31	7440-43-9	
Calcium	38900	mg/kg	22.9	1	12/12/17 11:25	12/17/17 16:31	7440-70-2	E
Chromium	425	mg/kg	1.1	1	12/12/17 11:25	12/17/17 16:31	7440-47-3	
Cobalt	41.1	mg/kg	1.1	1	12/12/17 11:25	12/17/17 16:31	7440-48-4	
Lead	92.3	mg/kg	1.1	1	12/12/17 11:25	12/17/17 16:31	7439-92-1	
Magnesium	85300	mg/kg	22.9	1	12/12/17 11:25	12/17/17 16:31	7439-95-4	E
Manganese	9470	mg/kg	1.1	1	12/12/17 11:25	12/17/17 16:31	7439-96-5	E
Selenium	ND	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:31	7782-49-2	
Silver	2.6	mg/kg	1.1	1	12/12/17 11:25	12/17/17 16:31	7440-22-4	
Sodium	1500	mg/kg	1140	1	12/12/17 11:25	12/17/17 16:31	7440-23-5	
Zinc	30100	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:31	7440-66-6	E,P8
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 8.91; Final pH: 5.5								
Arsenic	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:24	7440-38-2	
Barium	ND	mg/L	0.25	1	12/15/17 23:55	12/18/17 19:24	7440-39-3	
Cadmium	ND	mg/L	0.0050	1	12/15/17 23:55	12/18/17 19:24	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:24	7440-47-3	
Lead	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:24	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/15/17 23:55	12/18/17 19:24	7782-49-2	
Silver	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:24	7440-22-4	
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 8.91; Final pH: 5.5								
Mercury	ND	mg/L	0.00020	1	12/15/17 22:55	12/18/17 12:32	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92365955

Sample: G-3-U Lab ID: 92365955003 Collected: 12/05/17 16:00 Received: 12/06/17 17:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.13	mg/kg	0.010	1	12/13/17 16:34	12/14/17 17:58	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	67.9	%	0.10	1		12/07/17 11:31		
1010 Flashpoint,Closed Cup Analytical Method: EPA 1010								
Flashpoint	> 200.0	deg F	70.0	1		12/07/17 21:39		
9045 pH Soil Analytical Method: EPA 9045								
pH at 25 Degrees C	8.9	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3 Analytical Method: EPA 353.2								
Nitrogen, Nitrate	2060	mg/kg	290	50		12/14/17 02:52		
Nitrogen, Nitrite	ND	mg/kg	145	50		12/14/17 02:52		
733C S Reactive Cyanide Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2								
Cyanide, Reactive	ND	mg/kg	3.1	1	12/12/17 12:50	12/13/17 02:39		
734S Reactive Sulfide Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	31.1	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days Analytical Method: EPA 9056A								
Chloride	631	mg/kg	156	1		12/17/17 18:49	16887-00-6	
Sulfate	ND	mg/kg	156	1		12/17/17 18:49	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-3-L Lab ID: 92365955004 Collected: 12/05/17 16:00 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/14/17 13:00								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 16:51	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 16:51	57-74-9	
Endrin	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 16:51	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 16:51	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 16:51	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/15/17 14:03	12/16/17 16:51	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 16:51	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	56	%	10-138	1	12/15/17 14:03	12/16/17 16:51	2051-24-3	
Tetrachloro-m-xylene (S)	82	%	10-110	1	12/15/17 14:03	12/16/17 16:51	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 07:54	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 07:54	93-72-1	
Surrogates								
2,4-DCAA (S)	76	%	39-139	1	12/20/17 09:53	12/21/17 07:54	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	826	mg/kg	3.5	1	12/12/17 11:25	12/17/17 16:36	7440-38-2	
Barium	225	mg/kg	1.7	1	12/12/17 11:25	12/17/17 16:36	7440-39-3	
Cadmium	130	mg/kg	0.35	1	12/12/17 11:25	12/17/17 16:36	7440-43-9	
Calcium	33400	mg/kg	34.9	1	12/12/17 11:25	12/17/17 16:36	7440-70-2	
Chromium	596	mg/kg	1.7	1	12/12/17 11:25	12/17/17 16:36	7440-47-3	
Cobalt	4.9	mg/kg	1.7	1	12/12/17 11:25	12/17/17 16:36	7440-48-4	
Lead	1710	mg/kg	1.7	1	12/12/17 11:25	12/17/17 16:36	7439-92-1	
Magnesium	70400	mg/kg	34.9	1	12/12/17 11:25	12/17/17 16:36	7439-95-4	E
Manganese	4580	mg/kg	1.7	1	12/12/17 11:25	12/17/17 16:36	7439-96-5	E
Selenium	ND	mg/kg	3.5	1	12/12/17 11:25	12/17/17 16:36	7782-49-2	
Silver	6.5	mg/kg	1.7	1	12/12/17 11:25	12/17/17 16:36	7440-22-4	
Sodium	2760	mg/kg	1750	1	12/12/17 11:25	12/17/17 16:36	7440-23-5	
Zinc	59400	mg/kg	3.5	1	12/12/17 11:25	12/17/17 16:36	7440-66-6	E,P8
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.25; Final pH: 6								
Arsenic	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:28	7440-38-2	
Barium	0.55	mg/L	0.25	1	12/15/17 23:55	12/18/17 19:28	7440-39-3	
Cadmium	0.099	mg/L	0.0050	1	12/15/17 23:55	12/18/17 19:28	7440-43-9	
Chromium	0.092	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:28	7440-47-3	
Lead	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:28	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/15/17 23:55	12/18/17 19:28	7782-49-2	
Silver	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:28	7440-22-4	
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.25; Final pH: 6								
Mercury	ND	mg/L	0.00020	1	12/15/17 22:55	12/18/17 12:34	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-3-L Lab ID: 92365955004 Collected: 12/05/17 16:00 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	ND	mg/kg	0.020	1	12/13/17 16:34	12/14/17 18:05	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	81.4	%	0.10	1		12/07/17 11:31		
1010 Flashpoint,Closed Cup Analytical Method: EPA 1010								
Flashpoint	> 200.0	deg F	70.0	1		12/07/17 21:39		
9045 pH Soil Analytical Method: EPA 9045								
pH at 25 Degrees C	9.4	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3 Analytical Method: EPA 353.2								
Nitrogen, Nitrate	2600	mg/kg	501	50		12/14/17 02:53		
Nitrogen, Nitrite	ND	mg/kg	250	50		12/14/17 02:53		
733S Reactive Cyanide Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2								
Cyanide, Reactive	ND	mg/kg	5.4	1	12/12/17 12:50	12/13/17 02:42		
734S Reactive Sulfide Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	53.7	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days Analytical Method: EPA 9056A								
Chloride	1520	mg/kg	269	1		12/17/17 19:05	16887-00-6	
Sulfate	ND	mg/kg	269	1		12/17/17 19:05	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-6-U Lab ID: 92365955005 Collected: 12/05/17 13:15 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/14/17 13:00								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:09	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 17:09	57-74-9	
Endrin	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:09	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:09	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:09	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/15/17 14:03	12/16/17 17:09	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 17:09	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	43	%	10-138	1	12/15/17 14:03	12/16/17 17:09	2051-24-3	
Tetrachloro-m-xylene (S)	85	%	10-110	1	12/15/17 14:03	12/16/17 17:09	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 23:29	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 23:29	93-72-1	
Surrogates								
2,4-DCAA (S)	106	%	39-139	1	12/20/17 09:53	12/21/17 23:29	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	ND	mg/kg	164	50	12/12/17 11:25	12/18/17 14:45	7440-38-2	
Barium	ND	mg/kg	82.0	50	12/12/17 11:25	12/18/17 14:45	7440-39-3	
Cadmium	ND	mg/kg	16.4	50	12/12/17 11:25	12/18/17 14:45	7440-43-9	
Calcium	15300	mg/kg	1640	50	12/12/17 11:25	12/18/17 14:45	7440-70-2	
Chromium	ND	mg/kg	82.0	50	12/12/17 11:25	12/18/17 14:45	7440-47-3	
Cobalt	ND	mg/kg	82.0	50	12/12/17 11:25	12/18/17 14:45	7440-48-4	
Lead	ND	mg/kg	82.0	50	12/12/17 11:25	12/18/17 14:45	7439-92-1	
Magnesium	3120	mg/kg	1640	50	12/12/17 11:25	12/18/17 14:45	7439-95-4	
Manganese	ND	mg/kg	82.0	50	12/12/17 11:25	12/18/17 14:45	7439-96-5	
Selenium	ND	mg/kg	164	50	12/12/17 11:25	12/18/17 14:45	7782-49-2	
Silver	ND	mg/kg	82.0	50	12/12/17 11:25	12/18/17 14:45	7440-22-4	
Sodium	ND	mg/kg	82000	50	12/12/17 11:25	12/18/17 14:45	7440-23-5	
Zinc	888	mg/kg	164	50	12/12/17 11:25	12/18/17 14:45	7440-66-6	P8
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.15; Final pH: 6								
Arsenic	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:31	7440-38-2	
Barium	ND	mg/L	0.25	1	12/15/17 23:55	12/18/17 19:31	7440-39-3	
Cadmium	ND	mg/L	0.0050	1	12/15/17 23:55	12/18/17 19:31	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:31	7440-47-3	
Lead	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:31	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/15/17 23:55	12/18/17 19:31	7782-49-2	
Silver	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:31	7440-22-4	
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.15; Final pH: 6								
Mercury	ND	mg/L	0.00020	1	12/15/17 22:55	12/18/17 12:36	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-6-U Lab ID: 92365955005 Collected: 12/05/17 13:15 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.091	mg/kg	0.012	1	12/13/17 16:34	12/14/17 18:07	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	70.7	%	0.10	1		12/07/17 11:31		
1010 Flashpoint,Closed Cup Analytical Method: EPA 1010								
Flashpoint	> 200.0	deg F	70.0	1		12/07/17 21:39		
9045 pH Soil Analytical Method: EPA 9045								
pH at 25 Degrees C	9.3	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3 Analytical Method: EPA 353.2								
Nitrogen, Nitrate	4430	mg/kg	325	50		12/14/17 02:54		
Nitrogen, Nitrite	338	mg/kg	163	50		12/14/17 02:54		
733C S Reactive Cyanide Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2								
Cyanide, Reactive	ND	mg/kg	3.4	1	12/12/17 12:50	12/13/17 02:42		
734S Reactive Sulfide Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	34.1	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days Analytical Method: EPA 9056A								
Chloride	995	mg/kg	170	1		12/17/17 19:22	16887-00-6	
Sulfate	ND	mg/kg	170	1		12/17/17 19:22	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-6-L Lab ID: 92365955006 Collected: 12/05/17 13:15 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/14/17 13:00								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:27	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 17:27	57-74-9	
Endrin	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:27	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:27	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:27	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/15/17 14:03	12/16/17 17:27	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 17:27	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	48	%	10-138	1	12/15/17 14:03	12/16/17 17:27	2051-24-3	
Tetrachloro-m-xylene (S)	80	%	10-110	1	12/15/17 14:03	12/16/17 17:27	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 23:54	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 23:54	93-72-1	
Surrogates								
2,4-DCAA (S)	104	%	39-139	1	12/20/17 09:53	12/21/17 23:54	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	698	mg/kg	4.5	1	12/12/17 11:25	12/17/17 16:45	7440-38-2	
Barium	189	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:45	7440-39-3	
Cadmium	91.4	mg/kg	0.45	1	12/12/17 11:25	12/17/17 16:45	7440-43-9	
Calcium	60600	mg/kg	45.1	1	12/12/17 11:25	12/17/17 16:45	7440-70-2	E
Chromium	450	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:45	7440-47-3	
Cobalt	8.5	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:45	7440-48-4	
Lead	921	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:45	7439-92-1	
Magnesium	143000	mg/kg	45.1	1	12/12/17 11:25	12/17/17 16:45	7439-95-4	E
Manganese	8900	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:45	7439-96-5	E
Selenium	ND	mg/kg	4.5	1	12/12/17 11:25	12/17/17 16:45	7782-49-2	
Silver	5.0	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:45	7440-22-4	
Sodium	3350	mg/kg	2250	1	12/12/17 11:25	12/17/17 16:45	7440-23-5	
Zinc	58800	mg/kg	4.5	1	12/12/17 11:25	12/17/17 16:45	7440-66-6	E,P8
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.55; Final pH: 6								
Arsenic	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:35	7440-38-2	
Barium	0.62	mg/L	0.25	1	12/15/17 23:55	12/18/17 19:35	7440-39-3	
Cadmium	0.17	mg/L	0.0050	1	12/15/17 23:55	12/18/17 19:35	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:35	7440-47-3	
Lead	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:35	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/15/17 23:55	12/18/17 19:35	7782-49-2	
Silver	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:35	7440-22-4	
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 9.55; Final pH: 6								
Mercury	ND	mg/L	0.00020	1	12/15/17 22:55	12/18/17 12:39	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92365955

Sample: G-6-L Lab ID: 92365955006 Collected: 12/05/17 13:15 Received: 12/06/17 17:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	ND	mg/kg	0.024	1	12/13/17 16:34	12/14/17 18:09	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	81.5	%	0.10	1		12/07/17 11:32		
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	> 200.0	deg F	70.0	1		12/07/17 21:39		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	9.1	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	8120	mg/kg	532	50		12/14/17 02:59		
Nitrogen, Nitrite	567	mg/kg	266	50		12/14/17 02:59		
733 S Reactive Cyanide	Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	5.4	1	12/12/17 12:50	12/13/17 02:43		
734S Reactive Sulfide	Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2							
Sulfide, Reactive	ND	mg/kg	54.0	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days	Analytical Method: EPA 9056A							
Chloride	1240	mg/kg	270	1		12/17/17 19:39	16887-00-6	
Sulfate	ND	mg/kg	270	1		12/17/17 19:39	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92365955

Sample: G-9-U Lab ID: 92365955007 Collected: 12/05/17 10:15 Received: 12/06/17 17:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/14/17 13:00								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:45	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 17:45	57-74-9	
Endrin	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:45	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:45	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 17:45	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/15/17 14:03	12/16/17 17:45	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 17:45	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	45	%	10-138	1	12/15/17 14:03	12/16/17 17:45	2051-24-3	
Tetrachloro-m-xylene (S)	77	%	10-110	1	12/15/17 14:03	12/16/17 17:45	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/20/17 09:53	12/22/17 00:19	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/20/17 09:53	12/22/17 00:19	93-72-1	
Surrogates								
2,4-DCAA (S)	112	%	39-139	1	12/20/17 09:53	12/22/17 00:19	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	648	mg/kg	4.0	1	12/12/17 11:25	12/17/17 16:51	7440-38-2	
Barium	66.5	mg/kg	2.0	1	12/12/17 11:25	12/17/17 16:51	7440-39-3	
Cadmium	52.5	mg/kg	0.40	1	12/12/17 11:25	12/17/17 16:51	7440-43-9	
Calcium	126000	mg/kg	40.2	1	12/12/17 11:25	12/17/17 16:51	7440-70-2	E
Chromium	237	mg/kg	2.0	1	12/12/17 11:25	12/17/17 16:51	7440-47-3	
Cobalt	7.3	mg/kg	2.0	1	12/12/17 11:25	12/17/17 16:51	7440-48-4	
Lead	544	mg/kg	2.0	1	12/12/17 11:25	12/17/17 16:51	7439-92-1	
Magnesium	117000	mg/kg	40.2	1	12/12/17 11:25	12/17/17 16:51	7439-95-4	E
Manganese	10700	mg/kg	2.0	1	12/12/17 11:25	12/17/17 16:51	7439-96-5	E
Selenium	ND	mg/kg	4.0	1	12/12/17 11:25	12/17/17 16:51	7782-49-2	
Silver	2.9	mg/kg	2.0	1	12/12/17 11:25	12/17/17 16:51	7440-22-4	
Sodium	2610	mg/kg	2010	1	12/12/17 11:25	12/17/17 16:51	7440-23-5	
Zinc	50000	mg/kg	4.0	1	12/12/17 11:25	12/17/17 16:51	7440-66-6	E,P8
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 10.46; Final pH: 6								
Arsenic	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:46	7440-38-2	
Barium	0.45	mg/L	0.25	1	12/15/17 23:55	12/18/17 19:46	7440-39-3	
Cadmium	0.40	mg/L	0.0050	1	12/15/17 23:55	12/18/17 19:46	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:46	7440-47-3	
Lead	0.059	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:46	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/15/17 23:55	12/18/17 19:46	7782-49-2	
Silver	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:46	7440-22-4	
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 10.46; Final pH: 6								
Mercury	ND	mg/L	0.00020	1	12/15/17 22:55	12/18/17 12:46	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-9-U Lab ID: 92365955007 Collected: 12/05/17 10:15 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	0.083	mg/kg	0.021	1	12/13/17 16:34	12/14/17 18:12	7439-97-6	
Percent Moisture Analytical Method: ASTM D2974-87								
Percent Moisture	81.2	%	0.10	1		12/07/17 11:32		
1010 Flashpoint,Closed Cup Analytical Method: EPA 1010								
Flashpoint	> 200.0	deg F	70.0	1		12/07/17 21:39		
9045 pH Soil Analytical Method: EPA 9045								
pH at 25 Degrees C	10	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3 Analytical Method: EPA 353.2								
Nitrogen, Nitrate	8940	mg/kg	479	50		12/14/17 03:00		
Nitrogen, Nitrite	646	mg/kg	240	50		12/14/17 03:00		
733C S Reactive Cyanide Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2								
Cyanide, Reactive	ND	mg/kg	5.3	1	12/12/17 12:50	12/13/17 02:46		
734S Reactive Sulfide Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	53.0	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days Analytical Method: EPA 9056A								
Chloride	1510	mg/kg	266	1		12/17/17 20:30	16887-00-6	
Sulfate	326	mg/kg	266	1		12/17/17 20:30	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Sample: G-9-L Lab ID: 92365955008 Collected: 12/05/17 10:15 Received: 12/06/17 17:35 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/14/17 13:00								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 18:02	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 18:02	57-74-9	
Endrin	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 18:02	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 18:02	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/15/17 14:03	12/16/17 18:02	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/15/17 14:03	12/16/17 18:02	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/15/17 14:03	12/16/17 18:02	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	41	%	10-138	1	12/15/17 14:03	12/16/17 18:02	2051-24-3	
Tetrachloro-m-xylene (S)	78	%	10-110	1	12/15/17 14:03	12/16/17 18:02	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 09:33	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/20/17 09:53	12/21/17 09:33	93-72-1	
Surrogates								
2,4-DCAA (S)	58	%	39-139	1	12/20/17 09:53	12/21/17 09:33	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	300	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:55	7440-38-2	
Barium	182	mg/kg	1.2	1	12/12/17 11:25	12/17/17 16:55	7440-39-3	
Cadmium	9.2	mg/kg	0.23	1	12/12/17 11:25	12/17/17 16:55	7440-43-9	
Calcium	55400	mg/kg	23.0	1	12/12/17 11:25	12/17/17 16:55	7440-70-2	E
Chromium	91.1	mg/kg	1.2	1	12/12/17 11:25	12/17/17 16:55	7440-47-3	
Cobalt	13.0	mg/kg	1.2	1	12/12/17 11:25	12/17/17 16:55	7440-48-4	
Lead	24.9	mg/kg	1.2	1	12/12/17 11:25	12/17/17 16:55	7439-92-1	
Magnesium	75200	mg/kg	23.0	1	12/12/17 11:25	12/17/17 16:55	7439-95-4	E
Manganese	6470	mg/kg	1.2	1	12/12/17 11:25	12/17/17 16:55	7439-96-5	E
Selenium	ND	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:55	7782-49-2	
Silver	ND	mg/kg	1.2	1	12/12/17 11:25	12/17/17 16:55	7440-22-4	
Sodium	1790	mg/kg	1150	1	12/12/17 11:25	12/17/17 16:55	7440-23-5	
Zinc	22100	mg/kg	2.3	1	12/12/17 11:25	12/17/17 16:55	7440-66-6	E,P8
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 11.65; Final pH: 6								
Arsenic	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:50	7440-38-2	
Barium	ND	mg/L	0.25	1	12/15/17 23:55	12/18/17 19:50	7440-39-3	
Cadmium	ND	mg/L	0.0050	1	12/15/17 23:55	12/18/17 19:50	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/15/17 23:55	12/18/17 19:50	7440-47-3	
Lead	0.030	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:50	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/15/17 23:55	12/18/17 19:50	7782-49-2	
Silver	ND	mg/L	0.025	1	12/15/17 23:55	12/18/17 19:50	7440-22-4	
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/14/17 17:45 Initial pH: 11.65; Final pH: 6								
Mercury	ND	mg/L	0.00020	1	12/15/17 22:55	12/18/17 12:48	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92365955

Sample: G-9-L Lab ID: 92365955008 Collected: 12/05/17 10:15 Received: 12/06/17 17:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury	Analytical Method: EPA 7471 Preparation Method: EPA 7471							
Mercury	0.97	mg/kg	0.15	10	12/13/17 16:34	12/15/17 04:43	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	73.8	%	0.10	1		12/07/17 11:32		
1010 Flashpoint,Closed Cup	Analytical Method: EPA 1010							
Flashpoint	> 200.0	deg F	70.0	1		12/07/17 21:39		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	12.1	Std. Units	0.10	1		12/08/17 09:09		E
353.2 Nitrogen, NO2/NO3	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	3810	mg/kg	374	50		12/14/17 03:01		
Nitrogen, Nitrite	191	mg/kg	187	50		12/14/17 03:01		
733C S Reactive Cyanide	Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2							
Cyanide, Reactive	ND	mg/kg	3.8	1	12/12/17 12:50	12/13/17 02:47		
734S Reactive Sulfide	Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2							
Sulfide, Reactive	ND	mg/kg	38.1	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days	Analytical Method: EPA 9056A							
Chloride	459	mg/kg	191	1		12/17/17 20:47	16887-00-6	
Sulfate	ND	mg/kg	191	1		12/17/17 20:47	14808-79-8	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 391193 Analysis Method: EPA 7470
 QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 2170657 Matrix: Water
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	12/18/17 12:17	

LABORATORY CONTROL SAMPLE: 2170658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.0025	0.0025	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2170659 2170660

Parameter	Units	92365955002		2170660		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result					
Mercury	mg/L	ND	.0025	.0025	0.0027	0.0028	109	111	75-125	2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 390682 Analysis Method: EPA 7471
 QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 2167677 Matrix: Solid
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.0060	12/14/17 17:25	

LABORATORY CONTROL SAMPLE: 2167678

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.083	0.068	82	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2167679 2167680

Parameter	92365703001		MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	% Rec	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits				
Mercury	mg/kg	0.17	.099	.099	0.26	0.17	91	9	75-125	38	M1,R1		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 389776 Analysis Method: EPA 6010
 QC Batch Method: EPA 3050 Analysis Description: 6010 MET
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 2162332 Matrix: Solid
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	1.0	12/17/17 14:54	
Barium	mg/kg	ND	0.50	12/17/17 14:54	
Cadmium	mg/kg	ND	0.10	12/17/17 14:54	
Calcium	mg/kg	ND	10.0	12/17/17 14:54	
Chromium	mg/kg	ND	0.50	12/17/17 14:54	
Cobalt	mg/kg	ND	0.50	12/17/17 14:54	
Lead	mg/kg	ND	0.50	12/17/17 14:54	
Magnesium	mg/kg	ND	10.0	12/17/17 14:54	
Manganese	mg/kg	ND	0.50	12/17/17 14:54	
Selenium	mg/kg	ND	1.0	12/17/17 14:54	
Silver	mg/kg	ND	0.50	12/17/17 14:54	
Sodium	mg/kg	ND	500	12/17/17 14:54	
Zinc	mg/kg	1.2	1.0	12/17/17 14:54	

LABORATORY CONTROL SAMPLE: 2162333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	48.3	97	80-120	
Barium	mg/kg	50	50.0	100	80-120	
Cadmium	mg/kg	50	49.4	99	80-120	
Calcium	mg/kg	500	499	100	80-120	
Chromium	mg/kg	50	48.6	97	80-120	
Cobalt	mg/kg	50	48.3	97	80-120	
Lead	mg/kg	50	48.1	96	80-120	
Magnesium	mg/kg	500	482	96	80-120	
Manganese	mg/kg	50	47.5	95	80-120	
Selenium	mg/kg	50	49.0	98	80-120	
Silver	mg/kg	25	24.9	100	80-120	
Sodium	mg/kg	500	498J	100	80-120	
Zinc	mg/kg	50	47.8	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2162334 2162335

Parameter	Units	92365582001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result					
Arsenic	mg/kg	ND	42.7	44.7	32.3	35.8	67	72	75-125	10	M1
Barium	mg/kg	30.9	42.7	44.7	53.8	61.1	54	68	75-125	13	M1

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Parameter	92365582001		MS		MSD		MS		MSD		% Rec	Limits	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec						
Cadmium	mg/kg	ND	42.7	44.7	29.3	33.5	69	75	75-125	13	M1			
Calcium	mg/kg	17800	427	447	5540	11800	-2870	-1340	75-125	72	M1,R1			
Chromium	mg/kg	4.8	42.7	44.7	35.9	37.1	73	72	75-125	3	M1			
Cobalt	mg/kg	ND	42.7	44.7	30.0	34.3	67	74	75-125	13	M1			
Lead	mg/kg	7.2	42.7	44.7	35.7	41.1	67	76	75-125	14	M1			
Magnesium	mg/kg	1470	427	447	1070	1520	-94	9	75-125	34	M1,R1			
Manganese	mg/kg	108	42.7	44.7	108	190	1	185	75-125	55	M1,R1			
Selenium	mg/kg	ND	42.7	44.7	30.2	33.8	70	75	75-125	11	M1			
Silver	mg/kg	ND	21.3	22.3	16.6	16.3	78	73	75-125	2	M1			
Sodium	mg/kg	ND	427	447	ND	ND	78	69	75-125		M1			
Zinc	mg/kg	176	42.7	44.7	164	208	-28	71	75-125	24	M1,R1			

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 391192 Analysis Method: EPA 6010
 QC Batch Method: EPA 3010A Analysis Description: 6010 MET TCLP
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 2170649 Matrix: Water
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.050	12/18/17 19:02	
Barium	mg/L	ND	0.25	12/18/17 19:02	
Cadmium	mg/L	ND	0.0050	12/18/17 19:02	
Chromium	mg/L	ND	0.050	12/18/17 19:02	
Lead	mg/L	ND	0.025	12/18/17 19:02	
Selenium	mg/L	ND	0.10	12/18/17 19:02	
Silver	mg/L	ND	0.025	12/18/17 19:02	

LABORATORY CONTROL SAMPLE: 2170650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	2.5	2.6	103	80-120	
Barium	mg/L	2.5	2.2	89	80-120	
Cadmium	mg/L	2.5	2.4	95	80-120	
Chromium	mg/L	2.5	2.4	95	80-120	
Lead	mg/L	2.5	2.2	88	80-120	
Selenium	mg/L	2.5	2.7	107	80-120	
Silver	mg/L	1.2	1.2	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2170651 2170652

Parameter	92365955001		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	Units	Result									
Arsenic	mg/L	ND	2.5	2.5	2.6	2.6	104	102	75-125	2	
Barium	mg/L	ND	2.5	2.5	2.4	2.4	89	88	75-125	0	
Cadmium	mg/L	ND	2.5	2.5	2.3	2.2	91	90	75-125	2	
Chromium	mg/L	0.088	2.5	2.5	2.4	2.4	93	92	75-125	1	
Lead	mg/L	ND	2.5	2.5	2.2	2.2	87	86	75-125	1	
Selenium	mg/L	ND	2.5	2.5	2.7	2.6	106	102	75-125	4	
Silver	mg/L	ND	1.2	1.2	1.2	1.2	99	98	75-125	1	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 391152 Analysis Method: EPA 8081
 QC Batch Method: EPA 3510 Analysis Description: 8081 GCS TCLP Pesticides
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 2170267 Matrix: Water
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlordane (Technical)	ug/L	ND	3.0	12/16/17 18:20	
Endrin	ug/L	ND	0.50	12/16/17 18:20	
gamma-BHC (Lindane)	ug/L	ND	0.50	12/16/17 18:20	
Heptachlor	ug/L	ND	0.50	12/16/17 18:20	
Heptachlor epoxide	ug/L	ND	0.50	12/16/17 18:20	
Methoxychlor	ug/L	ND	1000	12/16/17 18:20	
Toxaphene	ug/L	ND	3.0	12/16/17 18:20	
Decachlorobiphenyl (S)	%	77	10-138	12/16/17 18:20	
Tetrachloro-m-xylene (S)	%	74	10-110	12/16/17 18:20	

LABORATORY CONTROL SAMPLE: 2170268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	ug/L	1.2	1.1	90	20-134	
gamma-BHC (Lindane)	ug/L	1.2	1.1	88	20-118	
Heptachlor	ug/L	1.2	0.92	75	20-142	
Heptachlor epoxide	ug/L	1.2	1.1	88	22-133	
Methoxychlor	ug/L	3.7	ND	97	44-150	
Decachlorobiphenyl (S)	%			81	10-138	
Tetrachloro-m-xylene (S)	%			86	10-110	

MATRIX SPIKE SAMPLE: 2170269

Parameter	Units	92365955001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Endrin	ug/L	ND	1.2	1.1	90	21-133	
gamma-BHC (Lindane)	ug/L	ND	1.2	1.1	87	24-119	
Heptachlor	ug/L	ND	1.2	0.86	70	16-128	
Heptachlor epoxide	ug/L	ND	1.2	1.0	85	50-150	
Methoxychlor	ug/L	ND	3.7	ND	90	50-150	
Decachlorobiphenyl (S)	%				57	10-138	
Tetrachloro-m-xylene (S)	%				85	10-110	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING

Pace Project No.: 92365955

SAMPLE DUPLICATE: 2170270

Parameter	Units	92365955002 Result	Dup Result	RPD	Qualifiers
Chlordane (Technical)	ug/L	ND	ND		
Endrin	ug/L	ND	ND		
gamma-BHC (Lindane)	ug/L	ND	ND		
Heptachlor	ug/L	ND	ND		
Heptachlor epoxide	ug/L	ND	ND		
Methoxychlor	ug/L	ND	ND		
Toxaphene	ug/L	ND	ND		
Decachlorobiphenyl (S)	%	49	43	13	
Tetrachloro-m-xylene (S)	%	85	78	8	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 413674 Analysis Method: EPA 8151
 QC Batch Method: EPA 3510 Analysis Description: 8151 GCS Herbicides TCLP
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 2254087 Matrix: Water
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-TP (Silvex)	mg/L	ND	0.00019	12/21/17 21:50	
2,4-D	mg/L	ND	0.00095	12/21/17 21:50	
2,4-DCAA (S)	%	104	39-139	12/21/17 21:50	

LABORATORY CONTROL SAMPLE: 2257130

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-TP (Silvex)	mg/L	.012	0.013	110	53-134	
2,4-D	mg/L	.06	0.064	106	35-124	
2,4-DCAA (S)	%			106	39-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2257131 2257133

Parameter	92365955001		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	Units	Result	Conc.	Conc.							
2,4,5-TP (Silvex)	mg/L	ND	.012	.012	0.0096	0.012	80	97	53-134	19	
2,4-D	mg/L	ND	.06	.06	0.050	0.061	84	101	35-124	19	
2,4-DCAA (S)	%						77	93	39-139		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
Pace Project No.: 92365955

QC Batch: 389711 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

SAMPLE DUPLICATE: 2162112

Parameter	Units	92365686001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	23.7	24.2	2	

SAMPLE DUPLICATE: 2162113

Parameter	Units	92365955008 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	73.8	74.2	1	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
Pace Project No.: 92365955

QC Batch:	389842	Analysis Method:	EPA 1010
QC Batch Method:	EPA 1010	Analysis Description:	1010 Flash Point, Closed Cup
Associated Lab Samples:	92365955001		

SAMPLE DUPLICATE: 2162654

Parameter	Units	92365543001 Result	Dup Result	RPD	Qualifiers
Flashpoint	deg F	>200	>200		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 389977 Analysis Method: EPA 1010
 QC Batch Method: EPA 1010 Analysis Description: 1010 Flash Point, Closed Cup
 Associated Lab Samples: 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

SAMPLE DUPLICATE: 2163710

Parameter	Units	92365955002 Result	Dup Result	RPD	Qualifiers
Flashpoint	deg F	> 200.0	> 200.0		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
Pace Project No.: 92365955

QC Batch: 389995	Analysis Method: EPA 9045
QC Batch Method: EPA 9045	Analysis Description: 9045 pH
Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008	

SAMPLE DUPLICATE: 2163769

Parameter	Units	92366220001 Result	Dup Result	RPD	Qualifiers
pH at 25 Degrees C	Std. Units	9.0	9.1	0	

SAMPLE DUPLICATE: 2163771

Parameter	Units	92365703001 Result	Dup Result	RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.6	7.6	0	

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REPORT OF LABORATORY ANALYSIS



QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 390791 Analysis Method: EPA 353.2
 QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 2168356 Matrix: Solid
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/kg	ND	2.0	12/14/17 00:58	
Nitrogen, Nitrite	mg/kg	ND	1.0	12/14/17 00:58	

LABORATORY CONTROL SAMPLE: 2168357

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/kg	25	24.8	99	90-110	
Nitrogen, Nitrite	mg/kg	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2168358 2168359

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result					
Nitrogen, Nitrate	mg/kg	2580	122	113	2900	2860	261	244	90-110	1 M6
Nitrogen, Nitrite	mg/kg	ND	49	45.1	163	147	157	134	90-110	10 M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2168360 2168361

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Spike Conc.	Result	Spike Conc.	Result					
Nitrogen, Nitrate	mg/kg	7080	106	111	7360	7660	267	526	90-110	4 M6
Nitrogen, Nitrite	mg/kg	401	42.6	44.4	457	451	131	112	90-110	1 M6

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 282053 Analysis Method: EPA 9014
 QC Batch Method: SW-846 7.3.3.2 Analysis Description: 733C Reactive Cyanide
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 1384635 Matrix: Solid
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	1.0	12/13/17 02:34	

LABORATORY CONTROL SAMPLE: 1384636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	99.8	ND	0	0-8	

SAMPLE DUPLICATE: 1384637

Parameter	Units	92366220010 Result	Dup Result	RPD	Qualifiers
Cyanide, Reactive	mg/kg	ND	ND		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 282051 Analysis Method: SM4500S2F-00
 QC Batch Method: SW-846 7.3.4.2 Analysis Description: 734S Reactive Sulfide
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 1384632 Matrix: Solid
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Reactive	mg/kg	ND	10	12/13/17 01:54	

LABORATORY CONTROL SAMPLE: 1384633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	199	43.7	22	0-52	

SAMPLE DUPLICATE: 1384634

Parameter	Units	92366220010 Result	Dup Result	RPD	Qualifiers
Sulfide, Reactive	mg/kg	ND	ND		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

QC Batch: 391225 Analysis Method: EPA 9056A
 QC Batch Method: EPA 9056A Analysis Description: 9056 IC Anions
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

METHOD BLANK: 2170806 Matrix: Solid
 Associated Lab Samples: 92365955001, 92365955002, 92365955003, 92365955004, 92365955005, 92365955006, 92365955007, 92365955008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	50.0	12/17/17 17:07	
Sulfate	mg/kg	ND	50.0	12/17/17 17:07	

LABORATORY CONTROL SAMPLE: 2170807

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	1250	1320	105	90-110	
Sulfate	mg/kg	1250	1310	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2170808 2170809

Parameter	Units	92365955001		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec					
Chloride	mg/kg	567	6130	6130	6130	6930	7280	104	109	90-110	5			
Sulfate	mg/kg	ND	6130	6130	6130	6410	6830	101	108	90-110	6			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2170810 2170811

Parameter	Units	92366220003		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Conc.	Result	Result	% Rec	% Rec					
Chloride	mg/kg	768	5790	5790	5790	6880	6930	106	106	90-110	1			
Sulfate	mg/kg	ND	5790	5790	5790	6200	6140	105	104	90-110	1			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LAGOON SAMPLING
Pace Project No.: 92365955

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.
ND - Not Detected at or above adjusted reporting limit.
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PQL - Practical Quantitation Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

LABORATORIES

PASI-A Pace Analytical Services - Asheville
PASI-C Pace Analytical Services - Charlotte
PASI-O Pace Analytical Services - Ormond Beach
PASI-PA Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.
M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
P8 Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.
R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92365955001	G-2-U	EPA 3510	391152	EPA 8081	391306
92365955002	G-2-L	EPA 3510	391152	EPA 8081	391306
92365955003	G-3-U	EPA 3510	391152	EPA 8081	391306
92365955004	G-3-L	EPA 3510	391152	EPA 8081	391306
92365955005	G-6-U	EPA 3510	391152	EPA 8081	391306
92365955006	G-6-L	EPA 3510	391152	EPA 8081	391306
92365955007	G-9-U	EPA 3510	391152	EPA 8081	391306
92365955008	G-9-L	EPA 3510	391152	EPA 8081	391306
92365955001	G-2-U	EPA 3510	413674	EPA 8151	413928
92365955002	G-2-L	EPA 3510	413674	EPA 8151	413928
92365955003	G-3-U	EPA 3510	413674	EPA 8151	413928
92365955004	G-3-L	EPA 3510	413674	EPA 8151	413928
92365955005	G-6-U	EPA 3510	413674	EPA 8151	413928
92365955006	G-6-L	EPA 3510	413674	EPA 8151	413928
92365955007	G-9-U	EPA 3510	413674	EPA 8151	413928
92365955008	G-9-L	EPA 3510	413674	EPA 8151	413928
92365955001	G-2-U	EPA 3050	389776	EPA 6010	390515
92365955002	G-2-L	EPA 3050	389776	EPA 6010	390515
92365955003	G-3-U	EPA 3050	389776	EPA 6010	390515
92365955004	G-3-L	EPA 3050	389776	EPA 6010	390515
92365955005	G-6-U	EPA 3050	389776	EPA 6010	390515
92365955006	G-6-L	EPA 3050	389776	EPA 6010	390515
92365955007	G-9-U	EPA 3050	389776	EPA 6010	390515
92365955008	G-9-L	EPA 3050	389776	EPA 6010	390515
92365955001	G-2-U	EPA 3010A	391192	EPA 6010	391236
92365955002	G-2-L	EPA 3010A	391192	EPA 6010	391236
92365955003	G-3-U	EPA 3010A	391192	EPA 6010	391236
92365955004	G-3-L	EPA 3010A	391192	EPA 6010	391236
92365955005	G-6-U	EPA 3010A	391192	EPA 6010	391236
92365955006	G-6-L	EPA 3010A	391192	EPA 6010	391236
92365955007	G-9-U	EPA 3010A	391192	EPA 6010	391236
92365955008	G-9-L	EPA 3010A	391192	EPA 6010	391236
92365955001	G-2-U	EPA 7470	391193	EPA 7470	391235
92365955002	G-2-L	EPA 7470	391193	EPA 7470	391235
92365955003	G-3-U	EPA 7470	391193	EPA 7470	391235
92365955004	G-3-L	EPA 7470	391193	EPA 7470	391235
92365955005	G-6-U	EPA 7470	391193	EPA 7470	391235
92365955006	G-6-L	EPA 7470	391193	EPA 7470	391235
92365955007	G-9-U	EPA 7470	391193	EPA 7470	391235
92365955008	G-9-L	EPA 7470	391193	EPA 7470	391235
92365955001	G-2-U	EPA 7471	390682	EPA 7471	390818
92365955002	G-2-L	EPA 7471	390682	EPA 7471	390818
92365955003	G-3-U	EPA 7471	390682	EPA 7471	390818
92365955004	G-3-L	EPA 7471	390682	EPA 7471	390818
92365955005	G-6-U	EPA 7471	390682	EPA 7471	390818
92365955006	G-6-L	EPA 7471	390682	EPA 7471	390818

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LAGOON SAMPLING
 Pace Project No.: 92365955

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92365955007	G-9-U	EPA 7471	390682	EPA 7471	390818
92365955008	G-9-L	EPA 7471	390682	EPA 7471	390818
92365955001	G-2-U	ASTM D2974-87	389711		
92365955002	G-2-L	ASTM D2974-87	389711		
92365955003	G-3-U	ASTM D2974-87	389711		
92365955004	G-3-L	ASTM D2974-87	389711		
92365955005	G-6-U	ASTM D2974-87	389711		
92365955006	G-6-L	ASTM D2974-87	389711		
92365955007	G-9-U	ASTM D2974-87	389711		
92365955008	G-9-L	ASTM D2974-87	389711		
92365955001	G-2-U	EPA 1010	389842		
92365955002	G-2-L	EPA 1010	389977		
92365955003	G-3-U	EPA 1010	389977		
92365955004	G-3-L	EPA 1010	389977		
92365955005	G-6-U	EPA 1010	389977		
92365955006	G-6-L	EPA 1010	389977		
92365955007	G-9-U	EPA 1010	389977		
92365955008	G-9-L	EPA 1010	389977		
92365955001	G-2-U	EPA 9045	389995		
92365955002	G-2-L	EPA 9045	389995		
92365955003	G-3-U	EPA 9045	389995		
92365955004	G-3-L	EPA 9045	389995		
92365955005	G-6-U	EPA 9045	389995		
92365955006	G-6-L	EPA 9045	389995		
92365955007	G-9-U	EPA 9045	389995		
92365955008	G-9-L	EPA 9045	389995		
92365955001	G-2-U	EPA 353.2	390791		
92365955002	G-2-L	EPA 353.2	390791		
92365955003	G-3-U	EPA 353.2	390791		
92365955004	G-3-L	EPA 353.2	390791		
92365955005	G-6-U	EPA 353.2	390791		
92365955006	G-6-L	EPA 353.2	390791		
92365955007	G-9-U	EPA 353.2	390791		
92365955008	G-9-L	EPA 353.2	390791		
92365955001	G-2-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92365955002	G-2-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92365955003	G-3-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92365955004	G-3-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92365955005	G-6-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92365955006	G-6-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92365955007	G-9-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92365955008	G-9-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92365955001	G-2-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92365955002	G-2-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92365955003	G-3-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LAGOON SAMPLING
Pace Project No.: 92365955

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92365955004	G-3-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92365955005	G-6-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92365955006	G-6-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92365955007	G-9-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92365955008	G-9-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92365955001	G-2-U	EPA 9056A	391225		
92365955002	G-2-L	EPA 9056A	391225		
92365955003	G-3-U	EPA 9056A	391225		
92365955004	G-3-L	EPA 9056A	391225		
92365955005	G-6-U	EPA 9056A	391225		
92365955006	G-6-L	EPA 9056A	391225		
92365955007	G-9-U	EPA 9056A	391225		
92365955008	G-9-L	EPA 9056A	391225		

REPORT OF LABORATORY ANALYSIS

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Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville

Sample Condition
Upon Receipt

Client Name:

Chemical Specialties

Project #:

WO# : 92365955

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____



Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 12/1/16

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?

Thermometer: IR Gun ID: T1904 Type of Ice: Wet Blue None

Yes No N/A

Correction Factor: Cooler Temp Corrected (°C): 10.5/19.6

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?
 Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

			Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>			
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____

Date/Time: _____

Comments/Sample Discrepancy: _____

Lot ID of split containers: _____

Project Manager SCURF Review: _____

Date: 12/1

Project Manager SRF Review: _____

Date: 12/2

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers)



Document Name:
Sample Condition Upon Receipt(SCUR)
 Document No.:
F-CAR-CS-033-Rev.04

Document Revised: August 4, 2017
 Page 2 of 2
 Issuing Authority:
 Pace Quality Office

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**
****Bottom half of box is to list number of bottles**

Project **WO# : 92365955**

PM: PTE Due Date: 12/20/17
 CLIENT: 92-Chem Spec

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2SO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN	
1									6																			
2									6																			
3									6																			
4									6																			
5									6																			
6									6																			
7									6																			
8									6																			
9									6																			
10									6																			
11									6																			
12									6																			

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information: Company: Chemical Specialties Inc. Address: 990 Hampton Dr Atlanta, GA 30328 Email: dncclay@bvnncald.com Phone: (704)773-6465 Fax Requested Due Date: Section B Required Project Information: Report To: Dan McCloy Copy To: Purchase Order #: Lagoon Sampling Project Name: Lagoon Sampling Project #: Section C Invoice Information: Attention: Company Name: Address: Pace Quote: Pace Project Manager: Taylor.erez@cspecials.com, Pace Profile #: 8795 Requested Analysis Filtered (Y/N): Regulatory Agency: State / Location: NC Page : 1 Of 1

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -)	MATRIX	CODE	COLLECTED		DATE	TIME	DATE	TIME	PRESERVATIVES							ANALYSES TEST							Residual Chlorine (Y/N)	Total Metals (except As, Ba, Cd, Cr, Pb, Se, Ag, Hg, Cu, Co, Ni, Mn, Na, Zn, Cu, Al)				
				START	END					Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Total Metals	TCPL Metals	TCPL Pest & Herb	Ignitability, pH, Anions	Reactive Cyanide & Sulfide	VOC			SULFATE	CHLORIDE	LITMUS	INDICATOR
1	G-2-U	Drinking Water	DW			12/5	12:00			X								X	X	X	X	X	X	X	X	X	X		001
2	G-2-L	Water	WT			12/5	12:00			X								X	X	X	X	X	X	X	X	X	X		002
3	G-3-U	Waste Water	WW			12/5	16:00			X								X	X	X	X	X	X	X	X	X	X		003
4	G-3-L	Product	P			12/5	16:00			X								X	X	X	X	X	X	X	X	X	X		004
5	G-6-U	Soil/Solid	SL			12/6	13:15			X								X	X	X	X	X	X	X	X	X	X		005
6	G-6-L	Oil	OL			12/6	13:15			X								X	X	X	X	X	X	X	X	X	X		006
7	G-9-U	Wipe	WP			12/6	10:15			X								X	X	X	X	X	X	X	X	X	X		008
8	G-9-L	Air	AR			12/6	10:15			X								X	X	X	X	X	X	X	X	X	X		008
9		Tracer	TR																										
10																													
11																													
12																													

REINQUISHED BY / AFFILIATION: <i>[Signature]</i>		DATE: 12-6-17	TIME: 1735	ACCEPTED BY / AFFILIATION: <i>[Signature]</i>	DATE: 12-6-17	TIME: 1735	TEMP IN C: 10.5	Received on Ice (Y/N): Y	Custody Sealed Cooler (Y/N): N	Samples Intact (Y/N): Y
SAMPLER NAME AND SIGNATURE: <i>[Signature]</i>		PRINT Name of SAMPLER: GIORF CACAT	SIGNATURE of SAMPLER: <i>[Signature]</i>	DATE Signed: 12-6-17						



Pace Analytical Services, LLC
9800 Kinsey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

January 02, 2018

Angela Baker
Chemical Specialties Inc.
5910 Pharr Mill Rd
Harrisburg, NC 28075

RE: Project: LAGOON SAMPLING
Pace Project No.: 92366220

Dear Angela Baker:

Enclosed are the analytical results for sample(s) received by the laboratory on December 07, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angela M. Baioni

Angela Baioni for
Taylor Ezell
taylor.ezell@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Dan McCloy, Brown & Caldwell
Ms. Jonna Stein, Chemical Specialties Inc.



REPORT OF LABORATORY ANALYSIS

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Page 1 of 87



CERTIFICATIONS

Project: LAGOON SAMPLING
Pace Project No.: 92366220

Pennsylvania Certification IDs

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
L-A-B DOD-ELAP Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification
Connecticut Certification #: PH-0694
Delaware Certification
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: 90133
Louisiana DHH/TNI Certification #: LA140008
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: PA00091
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification
Missouri Certification #: 235

Montana Certification #: Cert 0082
Nebraska Certification #: NE-05-29-14
Nevada Certification #: PA014572015-1
New Hampshire/TNI Certification #: 2976
New Jersey/TNI Certification #: PA 051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Oregon/TNI Certification #: PA200002
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: TN2867
Texas/TNI Certification #: T104704188-14-8
Utah/TNI Certification #: PA014572015-5
USDA Soil Permit #: P330-14-00213
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Certification
Wyoming Certification #: 8TMS-L

Ormond Beach Certification IDs

8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074

Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New Jersey Certification #: FL022
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Charlotte Certification IDs

9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LAGOON SAMPLING
Pace Project No.: 92366220

Charlotte Certification IDs

Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84

Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712

North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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SAMPLE ANALYTE COUNT

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory		
92366220001	G-5-U	EPA 8081	PKS	9	PASI-C		
		EPA 8151	NMB	3	PASI-O		
		EPA 6010	SH1	13	PASI-A		
		EPA 6010	SH1	7	PASI-A		
		EPA 7470	WAB	1	PASI-A		
		EPA 7471	WAB	1	PASI-A		
		EPA 8260	DLK	70	PASI-C		
		ASTM D2974-87	KDF	1	PASI-C		
		EPA 1010	ECH	1	PASI-A		
		EPA 9045	KDF1	1	PASI-A		
		EPA 353.2	CJH1	2	PASI-A		
		EPA 9014	PAS	1	PASI-PA		
		SM4500S2F-00	PAS	1	PASI-PA		
		EPA 9056A	CDC	2	PASI-A		
		92366220002	G-5-L	EPA 8081	PKS	9	PASI-C
				EPA 8151	NMB	3	PASI-O
EPA 6010	SH1			13	PASI-A		
EPA 6010	SH1			7	PASI-A		
EPA 7470	WAB			1	PASI-A		
EPA 7471	WAB			1	PASI-A		
EPA 8260	DLK			70	PASI-C		
ASTM D2974-87	KDF			1	PASI-C		
EPA 1010	ECH			1	PASI-A		
EPA 9045	KDF1			1	PASI-A		
EPA 353.2	CJH1			2	PASI-A		
EPA 9014	PAS			1	PASI-PA		
SM4500S2F-00	PAS			1	PASI-PA		
EPA 9056A	CDC			2	PASI-A		
92366220003	G-8-U			EPA 8081	PKS	9	PASI-C
				EPA 8151	NMB	3	PASI-O
		EPA 6010	SH1	13	PASI-A		
		EPA 6010	SH1	7	PASI-A		
		EPA 7470	WAB	1	PASI-A		
		EPA 7471	WAB	1	PASI-A		
		EPA 8260	DLK	70	PASI-C		
		ASTM D2974-87	KDF	1	PASI-C		
		EPA 1010	ECH	1	PASI-A		

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SAMPLE ANALYTE COUNT

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92366220004	G-8-L	EPA 9045	KDF1	1	PASI-A
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA
		EPA 9056A	CDC	2	PASI-A
		EPA 8081	PKS	9	PASI-C
		EPA 8151	NMB	3	PASI-O
		EPA 6010	SH1	13	PASI-A
		EPA 6010	SH1	7	PASI-A
		EPA 7470	WAB	1	PASI-A
		EPA 7471	WAB	1	PASI-A
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
		EPA 1010	ECH	1	PASI-A
		92366220005	G-7-U	EPA 9045	KDF1
EPA 353.2	CJH1			2	PASI-A
EPA 9014	PAS			1	PASI-PA
SM4500S2F-00	PAS			1	PASI-PA
EPA 9056A	CDC			2	PASI-A
EPA 8081	PKS			9	PASI-C
EPA 8151	NMB			3	PASI-O
EPA 6010	SH1			13	PASI-A
EPA 6010	SH1			7	PASI-A
EPA 7470	WAB			1	PASI-A
EPA 7471	WAB			1	PASI-A
EPA 8260	DLK			70	PASI-C
ASTM D2974-87	KDF			1	PASI-C
EPA 1010	ECH			1	PASI-A
92366220006	G-7-L			EPA 9045	ECH
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA
		EPA 9056A	CDC	2	PASI-A
		EPA 8081	PKS	9	PASI-C
		EPA 8151	NMB	3	PASI-O
		EPA 6010	SH1	13	PASI-A
		EPA 6010	SH1	7	PASI-A

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SAMPLE ANALYTE COUNT

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 7470	WAB	1	PASI-A
		EPA 7471	WAB	1	PASI-A
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
		EPA 1010	KMM	1	PASI-A
		EPA 9045	ECH	1	PASI-A
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA
92366220007	G-4-U	EPA 9056A	CDC	2	PASI-A
		EPA 8081	PKS	9	PASI-C
		EPA 8151	NMB	3	PASI-O
		EPA 6010	SH1	13	PASI-A
		EPA 6010	SH1	7	PASI-A
		EPA 7470	WAB	1	PASI-A
		EPA 7471	WAB	1	PASI-A
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
		EPA 1010	ECH	1	PASI-A
		EPA 9045	ECH	1	PASI-A
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA
		EPA 9056A	CDC	2	PASI-A
92366220008	G-4-L	EPA 8081	PKS	9	PASI-C
		EPA 8151	NMB	3	PASI-O
		EPA 6010	SH1	13	PASI-A
		EPA 6010	SH1	7	PASI-A
		EPA 7470	WAB	1	PASI-A
		EPA 7471	WAB	1	PASI-A
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
		EPA 1010	ECH	1	PASI-A
		EPA 9045	ECH	1	PASI-A
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92366220009	G-1-U	EPA 9056A	CDC	2	PASI-A
		EPA 8081	PKS	9	PASI-C
		EPA 8151	NMB	3	PASI-O
		EPA 6010	SH1	13	PASI-A
		EPA 6010	SH1	7	PASI-A
		EPA 7470	WAB	1	PASI-A
		EPA 7471	WAB	1	PASI-A
		EPA 8260	DLK	70	PASI-C
		ASTM D2974-87	KDF	1	PASI-C
		EPA 1010	ECH	1	PASI-A
		EPA 9045	ECH	1	PASI-A
		EPA 353.2	CJH1	2	PASI-A
		EPA 9014	PAS	1	PASI-PA
		SM4500S2F-00	PAS	1	PASI-PA
		92366220010	G-1-L	EPA 9056A	CDC
EPA 8081	PKS			9	PASI-C
EPA 8151	NMB			3	PASI-O
EPA 6010	SH1			13	PASI-A
EPA 6010	SH1			7	PASI-A
EPA 7470	WAB			1	PASI-A
EPA 7471	WAB			1	PASI-A
EPA 8260	DLK			70	PASI-C
ASTM D2974-87	KDF			1	PASI-C
EPA 1010	ECH			1	PASI-A
EPA 9045	ECH			1	PASI-A
EPA 353.2	CJH1			2	PASI-A
EPA 9014	PAS			1	PASI-PA
SM4500S2F-00	PAS			1	PASI-PA
92366220011	SLUDGE EQUIPMENT BLANK			EPA 9056A	CDC
		EPA 6010	SER	28	PASI-A
		EPA 7470	WAB	1	PASI-A
		EPA 300.0	CDC	4	PASI-A
		EPA 353.2	DMN	1	PASI-A

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92366220

Sample: G-5-U Lab ID: 92366220001 Collected: 12/06/17 14:20 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:02	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 10:02	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:02	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:02	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:02	1024-57-3	
Methoxychlor	ND	Methoxychlor	1000	1	12/16/17 09:28	12/18/17 10:02	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 10:02	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	76	%	10-138	1	12/16/17 09:28	12/18/17 10:02	2051-24-3	
Tetrachloro-m-xylene (S)	76	%	10-110	1	12/16/17 09:28	12/18/17 10:02	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 11:59	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 11:59	93-72-1	
Surrogates								
2,4-DCAA (S)	89	%	39-139	1	12/26/17 16:42	12/28/17 11:59	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	350	mg/kg	332	100	12/12/17 12:45	12/19/17 09:11	7440-38-2	
Barium	ND	mg/kg	166	100	12/12/17 12:45	12/19/17 09:11	7440-39-3	
Cadmium	56.3	mg/kg	33.2	100	12/12/17 12:45	12/19/17 09:11	7440-43-9	
Calcium	59900	mg/kg	3320	100	12/12/17 12:45	12/19/17 09:11	7440-70-2	
Chromium	295	mg/kg	166	100	12/12/17 12:45	12/19/17 09:11	7440-47-3	
Cobalt	ND	mg/kg	166	100	12/12/17 12:45	12/19/17 09:11	7440-48-4	
Lead	ND	mg/kg	166	100	12/12/17 12:45	12/19/17 09:11	7439-92-1	
Magnesium	107000	mg/kg	3320	100	12/12/17 12:45	12/19/17 09:11	7439-95-4	
Manganese	31200	mg/kg	166	100	12/12/17 12:45	12/19/17 09:11	7439-96-5	
Selenium	ND	mg/kg	332	100	12/12/17 12:45	12/19/17 09:11	7782-49-2	
Silver	ND	mg/kg	166	100	12/12/17 12:45	12/19/17 09:11	7440-22-4	
Sodium	ND	mg/kg	166000	100	12/12/17 12:45	12/19/17 09:11	7440-23-5	
Zinc	59500	mg/kg	332	100	12/12/17 12:45	12/19/17 09:11	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.83; Final pH: 5								
Arsenic	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 04:36	7440-38-2	
Barium	0.62	mg/L	0.25	1	12/17/17 11:45	12/19/17 04:36	7440-39-3	
Cadmium	0.32	mg/L	0.0050	1	12/17/17 11:45	12/19/17 04:36	7440-43-9	
Chromium	0.16	mg/L	0.050	1	12/17/17 11:45	12/19/17 04:36	7440-47-3	
Lead	0.060	mg/L	0.025	1	12/17/17 11:45	12/19/17 04:36	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 04:36	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 04:36	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.83; Final pH: 5								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:26	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92366220

Sample: G-5-U Lab ID: 92366220001 Collected: 12/06/17 14:20 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.032	mg/kg	0.024	1	12/13/17 16:34	12/14/17 18:54	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	538	1		12/12/17 17:10	67-64-1	
Benzene	ND	ug/kg	26.9	1		12/12/17 17:10	71-43-2	
Bromobenzene	ND	ug/kg	26.9	1		12/12/17 17:10	108-86-1	
Bromochloromethane	ND	ug/kg	26.9	1		12/12/17 17:10	74-97-5	
Bromodichloromethane	ND	ug/kg	26.9	1		12/12/17 17:10	75-27-4	
Bromoform	ND	ug/kg	26.9	1		12/12/17 17:10	75-25-2	
Bromomethane	ND	ug/kg	53.8	1		12/12/17 17:10	74-83-9	
2-Butanone (MEK)	ND	ug/kg	538	1		12/12/17 17:10	78-93-3	
n-Butylbenzene	ND	ug/kg	26.9	1		12/12/17 17:10	104-51-8	
sec-Butylbenzene	ND	ug/kg	26.9	1		12/12/17 17:10	135-98-8	
tert-Butylbenzene	ND	ug/kg	26.9	1		12/12/17 17:10	98-06-6	
Carbon tetrachloride	ND	ug/kg	26.9	1		12/12/17 17:10	56-23-5	
Chlorobenzene	ND	ug/kg	26.9	1		12/12/17 17:10	108-90-7	
Chloroethane	ND	ug/kg	53.8	1		12/12/17 17:10	75-00-3	
Chloroform	ND	ug/kg	26.9	1		12/12/17 17:10	67-66-3	
Chloromethane	ND	ug/kg	53.8	1		12/12/17 17:10	74-87-3	
2-Chlorotoluene	ND	ug/kg	26.9	1		12/12/17 17:10	95-49-8	
4-Chlorotoluene	ND	ug/kg	26.9	1		12/12/17 17:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	26.9	1		12/12/17 17:10	96-12-8	
Dibromochloromethane	ND	ug/kg	26.9	1		12/12/17 17:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	26.9	1		12/12/17 17:10	106-93-4	
Dibromomethane	ND	ug/kg	26.9	1		12/12/17 17:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	26.9	1		12/12/17 17:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	26.9	1		12/12/17 17:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	26.9	1		12/12/17 17:10	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	53.8	1		12/12/17 17:10	75-71-8	
1,1-Dichloroethane	ND	ug/kg	26.9	1		12/12/17 17:10	75-34-3	
1,2-Dichloroethane	ND	ug/kg	26.9	1		12/12/17 17:10	107-06-2	
1,1-Dichloroethene	ND	ug/kg	26.9	1		12/12/17 17:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	26.9	1		12/12/17 17:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	26.9	1		12/12/17 17:10	156-60-5	
1,2-Dichloropropane	ND	ug/kg	26.9	1		12/12/17 17:10	78-87-5	
1,3-Dichloropropane	ND	ug/kg	26.9	1		12/12/17 17:10	142-28-9	
2,2-Dichloropropane	ND	ug/kg	26.9	1		12/12/17 17:10	594-20-7	
1,1-Dichloropropene	ND	ug/kg	26.9	1		12/12/17 17:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	26.9	1		12/12/17 17:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	26.9	1		12/12/17 17:10	10061-02-6	
Diisopropyl ether	ND	ug/kg	26.9	1		12/12/17 17:10	108-20-3	
Ethylbenzene	ND	ug/kg	26.9	1		12/12/17 17:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	26.9	1		12/12/17 17:10	87-68-3	
2-Hexanone	ND	ug/kg	269	1		12/12/17 17:10	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	26.9	1		12/12/17 17:10	98-82-8	
p-Isopropyltoluene	ND	ug/kg	26.9	1		12/12/17 17:10	99-87-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-5-U Lab ID: 92366220001 Collected: 12/06/17 14:20 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	108	1		12/12/17 17:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	269	1		12/12/17 17:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	26.9	1		12/12/17 17:10	1634-04-4	
Naphthalene	ND	ug/kg	26.9	1		12/12/17 17:10	91-20-3	
n-Propylbenzene	ND	ug/kg	26.9	1		12/12/17 17:10	103-65-1	
Styrene	ND	ug/kg	26.9	1		12/12/17 17:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	26.9	1		12/12/17 17:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	26.9	1		12/12/17 17:10	79-34-5	
Tetrachloroethane	ND	ug/kg	26.9	1		12/12/17 17:10	127-18-4	
Toluene	ND	ug/kg	26.9	1		12/12/17 17:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	26.9	1		12/12/17 17:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	26.9	1		12/12/17 17:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	26.9	1		12/12/17 17:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	26.9	1		12/12/17 17:10	79-00-5	
Trichloroethene	ND	ug/kg	26.9	1		12/12/17 17:10	79-01-6	
Trichlorofluoromethane	ND	ug/kg	26.9	1		12/12/17 17:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	26.9	1		12/12/17 17:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	26.9	1		12/12/17 17:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	26.9	1		12/12/17 17:10	108-67-8	
Vinyl acetate	ND	ug/kg	269	1		12/12/17 17:10	108-05-4	
Vinyl chloride	ND	ug/kg	53.8	1		12/12/17 17:10	75-01-4	
Xylene (Total)	ND	ug/kg	53.8	1		12/12/17 17:10	1330-20-7	
m&p-Xylene	ND	ug/kg	53.8	1		12/12/17 17:10	179601-23-1	
o-Xylene	ND	ug/kg	26.9	1		12/12/17 17:10	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1		12/12/17 17:10	2037-26-5	1g
4-Bromofluorobenzene (S)	92	%	70-130	1		12/12/17 17:10	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-132	1		12/12/17 17:10	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	81.4	%	0.10	1		12/11/17 11:02		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/11/17 09:33		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.0	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	8600	mg/kg	513	50		12/14/17 03:02		
Nitrogen, Nitrite	525	mg/kg	257	50		12/14/17 03:02		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	5.4	1	12/12/17 12:50	12/13/17 02:47		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92366220

Sample: G-5-U Lab ID: 92366220001 Collected: 12/06/17 14:20 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide								
Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	53.6	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days								
Analytical Method: EPA 9056A								
Chloride	1040	mg/kg	269	1		12/17/17 21:04	16887-00-6	
Sulfate	ND	mg/kg	269	1		12/17/17 21:04	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-5-L Lab ID: 92366220002 Collected: 12/06/17 14:20 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:20	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 10:20	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:20	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:20	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:20	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 10:20	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 10:20	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	64	%	10-138	1	12/16/17 09:28	12/18/17 10:20	2051-24-3	
Tetrachloro-m-xylene (S)	78	%	10-110	1	12/16/17 09:28	12/18/17 10:20	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 12:23	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 12:23	93-72-1	
Surrogates								
2,4-DCAA (S)	72	%	39-139	1	12/26/17 16:42	12/28/17 12:23	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	ND	mg/kg	576	100	12/12/17 12:45	12/19/17 09:15	7440-38-2	
Barium	ND	mg/kg	288	100	12/12/17 12:45	12/19/17 09:15	7440-39-3	
Cadmium	ND	mg/kg	57.6	100	12/12/17 12:45	12/19/17 09:15	7440-43-9	
Calcium	74300	mg/kg	5760	100	12/12/17 12:45	12/19/17 09:15	7440-70-2	
Chromium	ND	mg/kg	288	100	12/12/17 12:45	12/19/17 09:15	7440-47-3	
Cobalt	ND	mg/kg	288	100	12/12/17 12:45	12/19/17 09:15	7440-48-4	
Lead	ND	mg/kg	288	100	12/12/17 12:45	12/19/17 09:15	7439-92-1	
Magnesium	97000	mg/kg	5760	100	12/12/17 12:45	12/19/17 09:15	7439-95-4	
Manganese	45300	mg/kg	288	100	12/12/17 12:45	12/19/17 09:15	7439-96-5	
Selenium	ND	mg/kg	576	100	12/12/17 12:45	12/19/17 09:15	7782-49-2	
Silver	ND	mg/kg	288	100	12/12/17 12:45	12/19/17 09:15	7440-22-4	
Sodium	ND	mg/kg	288000	100	12/12/17 12:45	12/19/17 09:15	7440-23-5	
Zinc	90800	mg/kg	576	100	12/12/17 12:45	12/19/17 09:15	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.64; Final pH: 6								
Arsenic	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 04:56	7440-38-2	
Barium	0.68	mg/L	0.25	1	12/17/17 11:45	12/19/17 04:56	7440-39-3	
Cadmium	0.18	mg/L	0.0050	1	12/17/17 11:45	12/19/17 04:56	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 04:56	7440-47-3	
Lead	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 04:56	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 04:56	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 04:56	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.64; Final pH: 6								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:33	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92366220

Sample: G-5-L Lab ID: 92366220002 Collected: 12/06/17 14:20 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.20	mg/kg	0.023	1	12/13/17 16:34	12/14/17 18:56	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	599	1		12/12/17 17:31	67-64-1	
Benzene	ND	ug/kg	30.0	1		12/12/17 17:31	71-43-2	
Bromobenzene	ND	ug/kg	30.0	1		12/12/17 17:31	108-86-1	
Bromochloromethane	ND	ug/kg	30.0	1		12/12/17 17:31	74-97-5	
Bromodichloromethane	ND	ug/kg	30.0	1		12/12/17 17:31	75-27-4	
Bromoform	ND	ug/kg	30.0	1		12/12/17 17:31	75-25-2	
Bromomethane	ND	ug/kg	59.9	1		12/12/17 17:31	74-83-9	
2-Butanone (MEK)	ND	ug/kg	599	1		12/12/17 17:31	78-93-3	
n-Butylbenzene	ND	ug/kg	30.0	1		12/12/17 17:31	104-51-8	
sec-Butylbenzene	ND	ug/kg	30.0	1		12/12/17 17:31	135-98-8	
tert-Butylbenzene	ND	ug/kg	30.0	1		12/12/17 17:31	98-06-6	
Carbon tetrachloride	ND	ug/kg	30.0	1		12/12/17 17:31	56-23-5	
Chlorobenzene	ND	ug/kg	30.0	1		12/12/17 17:31	108-90-7	
Chloroethane	ND	ug/kg	59.9	1		12/12/17 17:31	75-00-3	
Chloroform	ND	ug/kg	30.0	1		12/12/17 17:31	67-66-3	
Chloromethane	ND	ug/kg	59.9	1		12/12/17 17:31	74-87-3	
2-Chlorotoluene	ND	ug/kg	30.0	1		12/12/17 17:31	95-49-8	
4-Chlorotoluene	ND	ug/kg	30.0	1		12/12/17 17:31	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	30.0	1		12/12/17 17:31	96-12-8	
Dibromochloromethane	ND	ug/kg	30.0	1		12/12/17 17:31	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	30.0	1		12/12/17 17:31	106-93-4	
Dibromomethane	ND	ug/kg	30.0	1		12/12/17 17:31	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	30.0	1		12/12/17 17:31	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	30.0	1		12/12/17 17:31	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	30.0	1		12/12/17 17:31	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	59.9	1		12/12/17 17:31	75-71-8	
1,1-Dichloroethane	ND	ug/kg	30.0	1		12/12/17 17:31	75-34-3	
1,2-Dichloroethane	ND	ug/kg	30.0	1		12/12/17 17:31	107-06-2	
1,1-Dichloroethene	ND	ug/kg	30.0	1		12/12/17 17:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	30.0	1		12/12/17 17:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	30.0	1		12/12/17 17:31	156-60-5	
1,2-Dichloropropane	ND	ug/kg	30.0	1		12/12/17 17:31	78-87-5	
1,3-Dichloropropane	ND	ug/kg	30.0	1		12/12/17 17:31	142-28-9	
2,2-Dichloropropane	ND	ug/kg	30.0	1		12/12/17 17:31	594-20-7	
1,1-Dichloropropene	ND	ug/kg	30.0	1		12/12/17 17:31	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	30.0	1		12/12/17 17:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	30.0	1		12/12/17 17:31	10061-02-6	
Diisopropyl ether	ND	ug/kg	30.0	1		12/12/17 17:31	108-20-3	
Ethylbenzene	ND	ug/kg	30.0	1		12/12/17 17:31	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	30.0	1		12/12/17 17:31	87-68-3	
2-Hexanone	ND	ug/kg	300	1		12/12/17 17:31	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	30.0	1		12/12/17 17:31	98-82-8	
p-Isopropyltoluene	ND	ug/kg	30.0	1		12/12/17 17:31	99-87-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-5-L Lab ID: 92366220002 Collected: 12/06/17 14:20 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	120	1		12/12/17 17:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	300	1		12/12/17 17:31	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	30.0	1		12/12/17 17:31	1634-04-4	
Naphthalene	ND	ug/kg	30.0	1		12/12/17 17:31	91-20-3	
n-Propylbenzene	ND	ug/kg	30.0	1		12/12/17 17:31	103-65-1	
Styrene	ND	ug/kg	30.0	1		12/12/17 17:31	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	30.0	1		12/12/17 17:31	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	30.0	1		12/12/17 17:31	79-34-5	
Tetrachloroethene	ND	ug/kg	30.0	1		12/12/17 17:31	127-18-4	
Toluene	ND	ug/kg	30.0	1		12/12/17 17:31	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	30.0	1		12/12/17 17:31	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	30.0	1		12/12/17 17:31	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	30.0	1		12/12/17 17:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	30.0	1		12/12/17 17:31	79-00-5	
Trichloroethene	ND	ug/kg	30.0	1		12/12/17 17:31	79-01-6	
Trichlorofluoromethane	ND	ug/kg	30.0	1		12/12/17 17:31	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	30.0	1		12/12/17 17:31	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	30.0	1		12/12/17 17:31	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	30.0	1		12/12/17 17:31	108-67-8	
Vinyl acetate	ND	ug/kg	300	1		12/12/17 17:31	108-05-4	
Vinyl chloride	ND	ug/kg	59.9	1		12/12/17 17:31	75-01-4	
Xylene (Total)	ND	ug/kg	59.9	1		12/12/17 17:31	1330-20-7	
m&p-Xylene	ND	ug/kg	59.9	1		12/12/17 17:31	179601-23-1	
o-Xylene	ND	ug/kg	30.0	1		12/12/17 17:31	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1		12/12/17 17:31	2037-26-5	1g
4-Bromofluorobenzene (S)	99	%	70-130	1		12/12/17 17:31	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-132	1		12/12/17 17:31	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	83.3	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/11/17 09:33		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.2	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	9310	mg/kg	548	50		12/14/17 03:03		
Nitrogen, Nitrite	585	mg/kg	274	50		12/14/17 03:03		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	6.0	1	12/12/17 12:50	12/13/17 02:50		

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-5-L Lab ID: 92366220002 Collected: 12/06/17 14:20 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide								
Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	59.7	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days								
Analytical Method: EPA 9056A								
Chloride	1350	mg/kg	300	1		12/17/17 21:21	16887-00-6	
Sulfate	ND	mg/kg	300	1		12/17/17 21:21	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-8-U **Lab ID: 92366220003** Collected: 12/06/17 15:15 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:38	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 10:38	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:38	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:38	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:38	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 10:38	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 10:38	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	71	%	10-138	1	12/16/17 09:28	12/18/17 10:38	2051-24-3	
Tetrachloro-m-xylene (S)	72	%	10-110	1	12/16/17 09:28	12/18/17 10:38	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 12:48	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 12:48	93-72-1	
Surrogates								
2,4-DCAA (S)	89	%	39-139	1	12/26/17 16:42	12/28/17 12:48	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	540	mg/kg	246	100	12/12/17 12:45	12/19/17 09:19	7440-38-2	
Barium	169	mg/kg	123	100	12/12/17 12:45	12/19/17 09:19	7440-39-3	
Cadmium	68.7	mg/kg	24.6	100	12/12/17 12:45	12/19/17 09:19	7440-43-9	
Calcium	69600	mg/kg	2460	100	12/12/17 12:45	12/19/17 09:19	7440-70-2	
Chromium	195	mg/kg	123	100	12/12/17 12:45	12/19/17 09:19	7440-47-3	
Cobalt	ND	mg/kg	123	100	12/12/17 12:45	12/19/17 09:19	7440-48-4	
Lead	ND	mg/kg	123	100	12/12/17 12:45	12/19/17 09:19	7439-92-1	
Magnesium	112000	mg/kg	2460	100	12/12/17 12:45	12/19/17 09:19	7439-95-4	
Manganese	22800	mg/kg	123	100	12/12/17 12:45	12/19/17 09:19	7439-96-5	
Selenium	ND	mg/kg	246	100	12/12/17 12:45	12/19/17 09:19	7782-49-2	
Silver	ND	mg/kg	123	100	12/12/17 12:45	12/19/17 09:19	7440-22-4	
Sodium	ND	mg/kg	123000	100	12/12/17 12:45	12/19/17 09:19	7440-23-5	
Zinc	52000	mg/kg	246	100	12/12/17 12:45	12/19/17 09:19	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.5; Final pH: 6								
Arsenic	0.061	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:01	7440-38-2	
Barium	0.41	mg/L	0.25	1	12/17/17 11:45	12/19/17 05:01	7440-39-3	
Cadmium	ND	mg/L	0.0050	1	12/17/17 11:45	12/19/17 05:01	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:01	7440-47-3	
Lead	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:01	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 05:01	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:01	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.5; Final pH: 6								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:35	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-8-U Lab ID: 92366220003 Collected: 12/06/17 15:15 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.13	mg/kg	0.023	1	12/13/17 16:34	12/14/17 19:04	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	463	1		12/12/17 18:12	67-64-1	
Benzene	ND	ug/kg	23.1	1		12/12/17 18:12	71-43-2	
Bromobenzene	ND	ug/kg	23.1	1		12/12/17 18:12	108-86-1	
Bromochloromethane	ND	ug/kg	23.1	1		12/12/17 18:12	74-97-5	
Bromodichloromethane	ND	ug/kg	23.1	1		12/12/17 18:12	75-27-4	
Bromoform	ND	ug/kg	23.1	1		12/12/17 18:12	75-25-2	
Bromomethane	ND	ug/kg	46.3	1		12/12/17 18:12	74-83-9	
2-Butanone (MEK)	ND	ug/kg	463	1		12/12/17 18:12	78-93-3	
n-Butylbenzene	ND	ug/kg	23.1	1		12/12/17 18:12	104-51-8	
sec-Butylbenzene	ND	ug/kg	23.1	1		12/12/17 18:12	135-98-8	
tert-Butylbenzene	ND	ug/kg	23.1	1		12/12/17 18:12	98-06-6	
Carbon tetrachloride	ND	ug/kg	23.1	1		12/12/17 18:12	56-23-5	
Chlorobenzene	ND	ug/kg	23.1	1		12/12/17 18:12	108-90-7	
Chloroethane	ND	ug/kg	46.3	1		12/12/17 18:12	75-00-3	
Chloroform	ND	ug/kg	23.1	1		12/12/17 18:12	67-66-3	
Chloromethane	ND	ug/kg	46.3	1		12/12/17 18:12	74-87-3	
2-Chlorotoluene	ND	ug/kg	23.1	1		12/12/17 18:12	95-49-8	
4-Chlorotoluene	ND	ug/kg	23.1	1		12/12/17 18:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	23.1	1		12/12/17 18:12	96-12-8	
Dibromochloromethane	ND	ug/kg	23.1	1		12/12/17 18:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	23.1	1		12/12/17 18:12	106-93-4	
Dibromomethane	ND	ug/kg	23.1	1		12/12/17 18:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	23.1	1		12/12/17 18:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	23.1	1		12/12/17 18:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	23.1	1		12/12/17 18:12	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	46.3	1		12/12/17 18:12	75-71-8	
1,1-Dichloroethane	ND	ug/kg	23.1	1		12/12/17 18:12	75-34-3	
1,2-Dichloroethane	ND	ug/kg	23.1	1		12/12/17 18:12	107-06-2	
1,1-Dichloroethene	ND	ug/kg	23.1	1		12/12/17 18:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	23.1	1		12/12/17 18:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	23.1	1		12/12/17 18:12	156-60-5	
1,2-Dichloropropane	ND	ug/kg	23.1	1		12/12/17 18:12	78-87-5	
1,3-Dichloropropane	ND	ug/kg	23.1	1		12/12/17 18:12	142-28-9	
2,2-Dichloropropane	ND	ug/kg	23.1	1		12/12/17 18:12	594-20-7	
1,1-Dichloropropene	ND	ug/kg	23.1	1		12/12/17 18:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	23.1	1		12/12/17 18:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	23.1	1		12/12/17 18:12	10061-02-6	
Diisopropyl ether	ND	ug/kg	23.1	1		12/12/17 18:12	108-20-3	
Ethylbenzene	ND	ug/kg	23.1	1		12/12/17 18:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	23.1	1		12/12/17 18:12	87-68-3	
2-Hexanone	ND	ug/kg	23.1	1		12/12/17 18:12	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	23.1	1		12/12/17 18:12	98-82-8	
p-Isopropyltoluene	ND	ug/kg	23.1	1		12/12/17 18:12	99-87-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-8-U Lab ID: 92366220003 Collected: 12/06/17 15:15 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	92.6	1		12/12/17 18:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	231	1		12/12/17 18:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	23.1	1		12/12/17 18:12	1634-04-4	
Naphthalene	ND	ug/kg	23.1	1		12/12/17 18:12	91-20-3	
n-Propylbenzene	ND	ug/kg	23.1	1		12/12/17 18:12	103-65-1	
Styrene	ND	ug/kg	23.1	1		12/12/17 18:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	23.1	1		12/12/17 18:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	23.1	1		12/12/17 18:12	79-34-5	
Tetrachloroethane	ND	ug/kg	23.1	1		12/12/17 18:12	127-18-4	
Toluene	ND	ug/kg	23.1	1		12/12/17 18:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	23.1	1		12/12/17 18:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	23.1	1		12/12/17 18:12	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	23.1	1		12/12/17 18:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	23.1	1		12/12/17 18:12	79-00-5	
Trichloroethene	ND	ug/kg	23.1	1		12/12/17 18:12	79-01-6	
Trichlorofluoromethane	ND	ug/kg	23.1	1		12/12/17 18:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	23.1	1		12/12/17 18:12	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	23.1	1		12/12/17 18:12	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	23.1	1		12/12/17 18:12	108-67-8	
Vinyl acetate	ND	ug/kg	231	1		12/12/17 18:12	108-05-4	
Vinyl chloride	ND	ug/kg	46.3	1		12/12/17 18:12	75-01-4	
Xylene (Total)	ND	ug/kg	46.3	1		12/12/17 18:12	1330-20-7	
m&p-Xylene	ND	ug/kg	46.3	1		12/12/17 18:12	179601-23-1	
o-Xylene	ND	ug/kg	23.1	1		12/12/17 18:12	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	70-130	1		12/12/17 18:12	2037-26-5	1g
4-Bromofluorobenzene (S)	97	%	70-130	1		12/12/17 18:12	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-132	1		12/12/17 18:12	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	78.4	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/11/17 09:33		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.2	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	7080	mg/kg	463	50		12/14/17 03:04		M6
Nitrogen, Nitrite	401	mg/kg	231	50		12/14/17 03:04		M6
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	4.6	1	12/12/17 12:50	12/13/17 02:50		

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-8-U **Lab ID: 92366220003** Collected: 12/06/17 15:15 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide		Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2						
Sulfide, Reactive	ND	mg/kg	46.1	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days		Analytical Method: EPA 9056A						
Chloride	768	mg/kg	231	1		12/17/17 21:38	16887-00-6	
Sulfate	ND	mg/kg	231	1		12/17/17 21:38	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
Pace Project No.: 92366220

Sample: G-8-L **Lab ID: 92366220004** Collected: 12/06/17 15:15 Received: 12/07/17 16:30 Matrix: Solid
Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:57	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 10:57	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:57	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:57	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 10:57	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 10:57	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 10:57	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	74	%	10-138	1	12/16/17 09:28	12/18/17 10:57	2051-24-3	
Tetrachloro-m-xylene (S)	89	%	10-110	1	12/16/17 09:28	12/18/17 10:57	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 13:13	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 13:13	93-72-1	
Surrogates								
2,4-DCAA (S)	82	%	39-139	1	12/26/17 16:42	12/28/17 13:13	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	847	mg/kg	565	100	12/12/17 12:45	12/19/17 09:23	7440-38-2	
Barium	ND	mg/kg	283	100	12/12/17 12:45	12/19/17 09:23	7440-39-3	
Cadmium	93.6	mg/kg	56.5	100	12/12/17 12:45	12/19/17 09:23	7440-43-9	
Calcium	54700	mg/kg	5650	100	12/12/17 12:45	12/19/17 09:23	7440-70-2	
Chromium	ND	mg/kg	283	100	12/12/17 12:45	12/19/17 09:23	7440-47-3	
Cobalt	ND	mg/kg	283	100	12/12/17 12:45	12/19/17 09:23	7440-48-4	
Lead	ND	mg/kg	283	100	12/12/17 12:45	12/19/17 09:23	7439-92-1	
Magnesium	148000	mg/kg	5650	100	12/12/17 12:45	12/19/17 09:23	7439-95-4	
Manganese	14400	mg/kg	283	100	12/12/17 12:45	12/19/17 09:23	7439-96-5	
Selenium	ND	mg/kg	565	100	12/12/17 12:45	12/19/17 09:23	7782-49-2	
Silver	ND	mg/kg	283	100	12/12/17 12:45	12/19/17 09:23	7440-22-4	
Sodium	ND	mg/kg	283000	100	12/12/17 12:45	12/19/17 09:23	7440-23-5	
Zinc	76500	mg/kg	565	100	12/12/17 12:45	12/19/17 09:23	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.44; Final pH: 5.5								
Arsenic	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:04	7440-38-2	
Barium	0.34	mg/L	0.25	1	12/17/17 11:45	12/19/17 05:04	7440-39-3	
Cadmium	0.20	mg/L	0.0050	1	12/17/17 11:45	12/19/17 05:04	7440-43-9	
Chromium	0.080	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:04	7440-47-3	
Lead	0.055	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:04	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 05:04	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:04	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.44; Final pH: 5.5								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:42	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92366220

Sample: G-8-L Lab ID: 92366220004 Collected: 12/06/17 15:15 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.057	mg/kg	0.020	1	12/13/17 16:34	12/14/17 19:06	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	577	1		12/12/17 18:32	67-64-1	M1
Benzene	ND	ug/kg	28.8	1		12/12/17 18:32	71-43-2	
Bromobenzene	ND	ug/kg	28.8	1		12/12/17 18:32	108-86-1	M1
Bromochloromethane	ND	ug/kg	28.8	1		12/12/17 18:32	74-97-5	
Bromodichloromethane	ND	ug/kg	28.8	1		12/12/17 18:32	75-27-4	
Bromoform	ND	ug/kg	28.8	1		12/12/17 18:32	75-25-2	M1
Bromomethane	ND	ug/kg	57.7	1		12/12/17 18:32	74-83-9	
2-Butanone (MEK)	ND	ug/kg	577	1		12/12/17 18:32	78-93-3	
n-Butylbenzene	ND	ug/kg	28.8	1		12/12/17 18:32	104-51-8	M1
sec-Butylbenzene	ND	ug/kg	28.8	1		12/12/17 18:32	135-98-8	M1
tert-Butylbenzene	ND	ug/kg	28.8	1		12/12/17 18:32	98-06-6	M1
Carbon tetrachloride	ND	ug/kg	28.8	1		12/12/17 18:32	56-23-5	
Chlorobenzene	ND	ug/kg	28.8	1		12/12/17 18:32	108-90-7	M1
Chloroethane	ND	ug/kg	57.7	1		12/12/17 18:32	75-00-3	
Chloroform	ND	ug/kg	28.8	1		12/12/17 18:32	67-66-3	
Chloromethane	ND	ug/kg	57.7	1		12/12/17 18:32	74-87-3	
2-Chlorotoluene	ND	ug/kg	28.8	1		12/12/17 18:32	95-49-8	M1
4-Chlorotoluene	ND	ug/kg	28.8	1		12/12/17 18:32	106-43-4	M1
1,2-Dibromo-3-chloropropane	ND	ug/kg	28.8	1		12/12/17 18:32	96-12-8	M1
Dibromochloromethane	ND	ug/kg	28.8	1		12/12/17 18:32	124-48-1	M1
1,2-Dibromoethane (EDB)	ND	ug/kg	28.8	1		12/12/17 18:32	106-93-4	M1
Dibromomethane	ND	ug/kg	28.8	1		12/12/17 18:32	74-95-3	M1
1,2-Dichlorobenzene	ND	ug/kg	28.8	1		12/12/17 18:32	95-50-1	M1
1,3-Dichlorobenzene	ND	ug/kg	28.8	1		12/12/17 18:32	541-73-1	M1
1,4-Dichlorobenzene	ND	ug/kg	28.8	1		12/12/17 18:32	106-46-7	M1
Dichlorodifluoromethane	ND	ug/kg	57.7	1		12/12/17 18:32	75-71-8	
1,1-Dichloroethane	ND	ug/kg	28.8	1		12/12/17 18:32	75-34-3	
1,2-Dichloroethane	ND	ug/kg	28.8	1		12/12/17 18:32	107-06-2	
1,1-Dichloroethene	ND	ug/kg	28.8	1		12/12/17 18:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	28.8	1		12/12/17 18:32	156-59-2	M1
trans-1,2-Dichloroethene	ND	ug/kg	28.8	1		12/12/17 18:32	156-60-5	M1
1,2-Dichloropropane	ND	ug/kg	28.8	1		12/12/17 18:32	78-87-5	
1,3-Dichloropropane	ND	ug/kg	28.8	1		12/12/17 18:32	142-28-9	
2,2-Dichloropropane	ND	ug/kg	28.8	1		12/12/17 18:32	594-20-7	
1,1-Dichloropropene	ND	ug/kg	28.8	1		12/12/17 18:32	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	28.8	1		12/12/17 18:32	10061-01-5	M1
trans-1,3-Dichloropropene	ND	ug/kg	28.8	1		12/12/17 18:32	10061-02-6	M1
Diisopropyl ether	ND	ug/kg	28.8	1		12/12/17 18:32	108-20-3	
Ethylbenzene	ND	ug/kg	28.8	1		12/12/17 18:32	100-41-4	M1
Hexachloro-1,3-butadiene	ND	ug/kg	28.8	1		12/12/17 18:32	87-68-3	M1
2-Hexanone	ND	ug/kg	288	1		12/12/17 18:32	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	28.8	1		12/12/17 18:32	98-82-8	M1
p-Isopropyltoluene	ND	ug/kg	28.8	1		12/12/17 18:32	99-87-6	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-8-L Lab ID: 92366220004 Collected: 12/06/17 15:15 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	115	1		12/12/17 18:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	288	1		12/12/17 18:32	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	28.8	1		12/12/17 18:32	1634-04-4	
Naphthalene	ND	ug/kg	28.8	1		12/12/17 18:32	91-20-3	M1
n-Propylbenzene	ND	ug/kg	28.8	1		12/12/17 18:32	103-65-1	M1
Styrene	ND	ug/kg	28.8	1		12/12/17 18:32	100-42-5	M1
1,1,1,2-Tetrachloroethane	ND	ug/kg	28.8	1		12/12/17 18:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	28.8	1		12/12/17 18:32	79-34-5	M1
Tetrachloroethene	ND	ug/kg	28.8	1		12/12/17 18:32	127-18-4	M1
Toluene	ND	ug/kg	28.8	1		12/12/17 18:32	108-88-3	M1
1,2,3-Trichlorobenzene	ND	ug/kg	28.8	1		12/12/17 18:32	87-61-6	M1
1,2,4-Trichlorobenzene	ND	ug/kg	28.8	1		12/12/17 18:32	120-82-1	M1
1,1,1-Trichloroethane	ND	ug/kg	28.8	1		12/12/17 18:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	28.8	1		12/12/17 18:32	79-00-5	
Trichloroethene	ND	ug/kg	28.8	1		12/12/17 18:32	79-01-6	
Trichlorofluoromethane	ND	ug/kg	28.8	1		12/12/17 18:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	28.8	1		12/12/17 18:32	96-18-4	M1
1,2,4-Trimethylbenzene	ND	ug/kg	28.8	1		12/12/17 18:32	95-63-6	M1
1,3,5-Trimethylbenzene	ND	ug/kg	28.8	1		12/12/17 18:32	108-67-8	M1
Vinyl acetate	ND	ug/kg	288	1		12/12/17 18:32	108-05-4	M1
Vinyl chloride	ND	ug/kg	57.7	1		12/12/17 18:32	75-01-4	
Xylene (Total)	ND	ug/kg	57.7	1		12/12/17 18:32	1330-20-7	MS
m&p-Xylene	ND	ug/kg	57.7	1		12/12/17 18:32	179601-23-1	M1
o-Xylene	ND	ug/kg	28.8	1		12/12/17 18:32	95-47-6	M1
Surrogates								
Toluene-d8 (S)	100	%	70-130	1		12/12/17 18:32	2037-26-5	1g
4-Bromofluorobenzene (S)	99	%	70-130	1		12/12/17 18:32	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-132	1		12/12/17 18:32	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	82.7	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/11/17 09:33		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.2	Std. Units	0.10	1		12/08/17 09:09		
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	10000	mg/kg	524	50		12/14/17 03:13		
Nitrogen, Nitrite	573	mg/kg	262	50		12/14/17 03:13		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	5.7	1	12/12/17 12:50	12/13/17 02:51		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-8-L Lab ID: 92366220004 Collected: 12/06/17 15:15 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide		Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2						
Sulfide, Reactive	ND	mg/kg	57.2	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days		Analytical Method: EPA 9056A						
Chloride	1360	mg/kg	288	1		12/17/17 22:28	16887-00-6	
Sulfate	ND	mg/kg	288	1		12/17/17 22:28	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-7-U Lab ID: 92366220005 Collected: 12/07/17 09:30 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:15	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 11:15	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:15	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:15	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:15	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 11:15	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 11:15	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	71	%	10-138	1	12/16/17 09:28	12/18/17 11:15	2051-24-3	
Tetrachloro-m-xylene (S)	73	%	10-110	1	12/16/17 09:28	12/18/17 11:15	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 14:02	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 14:02	93-72-1	
Surrogates								
2,4-DCAA (S)	72	%	39-139	1	12/26/17 16:42	12/28/17 14:02	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	1610	mg/kg	533	100	12/12/17 12:45	12/19/17 09:27	7440-38-2	
Barium	ND	mg/kg	266	100	12/12/17 12:45	12/19/17 09:27	7440-39-3	
Cadmium	ND	mg/kg	53.3	100	12/12/17 12:45	12/19/17 09:27	7440-43-9	
Calcium	84800	mg/kg	5330	100	12/12/17 12:45	12/19/17 09:27	7440-70-2	
Chromium	ND	mg/kg	266	100	12/12/17 12:45	12/19/17 09:27	7440-47-3	
Cobalt	ND	mg/kg	266	100	12/12/17 12:45	12/19/17 09:27	7440-48-4	
Lead	ND	mg/kg	266	100	12/12/17 12:45	12/19/17 09:27	7439-92-1	
Magnesium	82300	mg/kg	5330	100	12/12/17 12:45	12/19/17 09:27	7439-95-4	
Manganese	57000	mg/kg	266	100	12/12/17 12:45	12/19/17 09:27	7439-96-5	
Selenium	ND	mg/kg	533	100	12/12/17 12:45	12/19/17 09:27	7782-49-2	
Silver	ND	mg/kg	266	100	12/12/17 12:45	12/19/17 09:27	7440-22-4	
Sodium	ND	mg/kg	266000	100	12/12/17 12:45	12/19/17 09:27	7440-23-5	
Zinc	97800	mg/kg	533	100	12/12/17 12:45	12/19/17 09:27	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.3; Final pH: 5								
Arsenic	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:08	7440-38-2	
Barium	ND	mg/L	0.25	1	12/17/17 11:45	12/19/17 05:08	7440-39-3	
Cadmium	0.078	mg/L	0.0050	1	12/17/17 11:45	12/19/17 05:08	7440-43-9	
Chromium	0.078	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:08	7440-47-3	
Lead	0.078	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:08	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 05:08	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:08	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.3; Final pH: 5								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:45	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-7-U Lab ID: 92366220005 Collected: 12/07/17 09:30 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.16	mg/kg	0.023	1	12/13/17 16:34	12/14/17 19:08	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	639	1		12/12/17 19:13	67-64-1	
Benzene	ND	ug/kg	32.0	1		12/12/17 19:13	71-43-2	
Bromobenzene	ND	ug/kg	32.0	1		12/12/17 19:13	108-86-1	
Bromochloromethane	ND	ug/kg	32.0	1		12/12/17 19:13	74-97-5	
Bromodichloromethane	ND	ug/kg	32.0	1		12/12/17 19:13	75-27-4	
Bromoform	ND	ug/kg	32.0	1		12/12/17 19:13	75-25-2	
Bromomethane	ND	ug/kg	63.9	1		12/12/17 19:13	74-83-9	
2-Butanone (MEK)	ND	ug/kg	639	1		12/12/17 19:13	78-93-3	
n-Butylbenzene	ND	ug/kg	32.0	1		12/12/17 19:13	104-51-8	
sec-Butylbenzene	ND	ug/kg	32.0	1		12/12/17 19:13	135-98-8	
tert-Butylbenzene	ND	ug/kg	32.0	1		12/12/17 19:13	98-06-6	
Carbon tetrachloride	ND	ug/kg	32.0	1		12/12/17 19:13	56-23-5	
Chlorobenzene	ND	ug/kg	32.0	1		12/12/17 19:13	108-90-7	
Chloroethane	ND	ug/kg	63.9	1		12/12/17 19:13	75-00-3	
Chloroform	ND	ug/kg	32.0	1		12/12/17 19:13	67-66-3	
Chloromethane	ND	ug/kg	63.9	1		12/12/17 19:13	74-87-3	
2-Chlorotoluene	ND	ug/kg	32.0	1		12/12/17 19:13	95-49-8	
4-Chlorotoluene	ND	ug/kg	32.0	1		12/12/17 19:13	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	32.0	1		12/12/17 19:13	96-12-8	
Dibromochloromethane	ND	ug/kg	32.0	1		12/12/17 19:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	32.0	1		12/12/17 19:13	106-93-4	
Dibromomethane	ND	ug/kg	32.0	1		12/12/17 19:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	32.0	1		12/12/17 19:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	32.0	1		12/12/17 19:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	32.0	1		12/12/17 19:13	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	63.9	1		12/12/17 19:13	75-71-8	
1,1-Dichloroethane	ND	ug/kg	32.0	1		12/12/17 19:13	75-34-3	
1,2-Dichloroethane	ND	ug/kg	32.0	1		12/12/17 19:13	107-06-2	
1,1-Dichloroethene	ND	ug/kg	32.0	1		12/12/17 19:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	32.0	1		12/12/17 19:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	32.0	1		12/12/17 19:13	156-60-5	
1,2-Dichloropropane	ND	ug/kg	32.0	1		12/12/17 19:13	78-87-5	
1,3-Dichloropropane	ND	ug/kg	32.0	1		12/12/17 19:13	142-28-9	
2,2-Dichloropropane	ND	ug/kg	32.0	1		12/12/17 19:13	594-20-7	
1,1-Dichloropropene	ND	ug/kg	32.0	1		12/12/17 19:13	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	32.0	1		12/12/17 19:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	32.0	1		12/12/17 19:13	10061-02-6	
Diisopropyl ether	ND	ug/kg	32.0	1		12/12/17 19:13	108-20-3	
Ethylbenzene	ND	ug/kg	32.0	1		12/12/17 19:13	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	32.0	1		12/12/17 19:13	87-68-3	
2-Hexanone	ND	ug/kg	320	1		12/12/17 19:13	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	32.0	1		12/12/17 19:13	98-82-8	
p-Isopropyltoluene	ND	ug/kg	32.0	1		12/12/17 19:13	99-87-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-7-U Lab ID: 92366220005 Collected: 12/07/17 09:30 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	128	1		12/12/17 19:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	320	1		12/12/17 19:13	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	32.0	1		12/12/17 19:13	1634-04-4	
Naphthalene	ND	ug/kg	32.0	1		12/12/17 19:13	91-20-3	
n-Propylbenzene	ND	ug/kg	32.0	1		12/12/17 19:13	103-65-1	
Styrene	ND	ug/kg	32.0	1		12/12/17 19:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	32.0	1		12/12/17 19:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	32.0	1		12/12/17 19:13	79-34-5	
Tetrachloroethene	ND	ug/kg	32.0	1		12/12/17 19:13	127-18-4	
Toluene	ND	ug/kg	32.0	1		12/12/17 19:13	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	32.0	1		12/12/17 19:13	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	32.0	1		12/12/17 19:13	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	32.0	1		12/12/17 19:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	32.0	1		12/12/17 19:13	79-00-5	
Trichloroethene	ND	ug/kg	32.0	1		12/12/17 19:13	79-01-6	
Trichlorofluoromethane	ND	ug/kg	32.0	1		12/12/17 19:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	32.0	1		12/12/17 19:13	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	32.0	1		12/12/17 19:13	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	32.0	1		12/12/17 19:13	108-67-8	
Vinyl acetate	ND	ug/kg	320	1		12/12/17 19:13	108-05-4	
Vinyl chloride	ND	ug/kg	63.9	1		12/12/17 19:13	75-01-4	
Xylene (Total)	ND	ug/kg	63.9	1		12/12/17 19:13	1330-20-7	
m&p-Xylene	ND	ug/kg	63.9	1		12/12/17 19:13	179601-23-1	
o-Xylene	ND	ug/kg	32.0	1		12/12/17 19:13	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%	70-130	1		12/12/17 19:13	2037-26-5	1g
4-Bromofluorobenzene (S)	101	%	70-130	1		12/12/17 19:13	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	70-132	1		12/12/17 19:13	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	84.4	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/11/17 09:33		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	8.6	Std. Units	0.10	1		12/11/17 15:00		H1
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	13000	mg/kg	634	50		12/14/17 03:14		
Nitrogen, Nitrite	485	mg/kg	317	50		12/14/17 03:14		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	6.4	1	12/12/17 12:50	12/13/17 02:52		

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-7-U Lab ID: 92366220005 Collected: 12/07/17 09:30 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide	Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2							
Sulfide, Reactive	ND	mg/kg	63.9	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days	Analytical Method: EPA 9056A							
Chloride	1250	mg/kg	320	1		12/17/17 22:45	16887-00-6	
Sulfate	ND	mg/kg	320	1		12/17/17 22:45	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-7-L Lab ID: 92366220006 Collected: 12/07/17 09:30 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:33	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 11:33	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:33	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:33	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:33	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 11:33	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 11:33	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	73	%	10-138	1	12/16/17 09:28	12/18/17 11:33	2051-24-3	
Tetrachloro-m-xylene (S)	85	%	10-110	1	12/16/17 09:28	12/18/17 11:33	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 14:27	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 14:27	93-72-1	
Surrogates								
2,4-DCAA (S)	66	%	39-139	1	12/26/17 16:42	12/28/17 14:27	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	ND	mg/kg	423	100	12/12/17 12:45	12/19/17 09:31	7440-38-2	
Barium	ND	mg/kg	211	100	12/12/17 12:45	12/19/17 09:31	7440-39-3	
Cadmium	ND	mg/kg	42.3	100	12/12/17 12:45	12/19/17 09:31	7440-43-9	
Calcium	110000	mg/kg	4230	100	12/12/17 12:45	12/19/17 09:31	7440-70-2	
Chromium	268	mg/kg	211	100	12/12/17 12:45	12/19/17 09:31	7440-47-3	
Cobalt	ND	mg/kg	211	100	12/12/17 12:45	12/19/17 09:31	7440-48-4	
Lead	ND	mg/kg	211	100	12/12/17 12:45	12/19/17 09:31	7439-92-1	
Magnesium	95000	mg/kg	4230	100	12/12/17 12:45	12/19/17 09:31	7439-95-4	
Manganese	55600	mg/kg	211	100	12/12/17 12:45	12/19/17 09:31	7439-96-5	
Selenium	ND	mg/kg	423	100	12/12/17 12:45	12/19/17 09:31	7782-49-2	
Silver	ND	mg/kg	211	100	12/12/17 12:45	12/19/17 09:31	7440-22-4	
Sodium	ND	mg/kg	211000	100	12/12/17 12:45	12/19/17 09:31	7440-23-5	
Zinc	96300	mg/kg	423	100	12/12/17 12:45	12/19/17 09:31	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.43; Final pH: 5.5								
Arsenic	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:13	7440-38-2	
Barium	0.66	mg/L	0.25	1	12/17/17 11:45	12/19/17 05:13	7440-39-3	
Cadmium	0.18	mg/L	0.0050	1	12/17/17 11:45	12/19/17 05:13	7440-43-9	
Chromium	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:13	7440-47-3	
Lead	0.080	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:13	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 05:13	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:13	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.43; Final pH: 5.5								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:47	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-7-L Lab ID: 92366220006 Collected: 12/07/17 09:30 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.11	mg/kg	0.029	1	12/13/17 16:34	12/14/17 19:11	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	617	1		12/12/17 19:34	67-64-1	
Benzene	ND	ug/kg	30.9	1		12/12/17 19:34	71-43-2	
Bromobenzene	ND	ug/kg	30.9	1		12/12/17 19:34	108-86-1	
Bromochloromethane	ND	ug/kg	30.9	1		12/12/17 19:34	74-97-5	
Bromodichloromethane	ND	ug/kg	30.9	1		12/12/17 19:34	75-27-4	
Bromoform	ND	ug/kg	30.9	1		12/12/17 19:34	75-25-2	
Bromomethane	ND	ug/kg	61.7	1		12/12/17 19:34	74-83-9	
2-Butanone (MEK)	ND	ug/kg	617	1		12/12/17 19:34	78-93-3	
n-Butylbenzene	ND	ug/kg	30.9	1		12/12/17 19:34	104-51-8	
sec-Butylbenzene	ND	ug/kg	30.9	1		12/12/17 19:34	135-98-8	
tert-Butylbenzene	ND	ug/kg	30.9	1		12/12/17 19:34	98-06-6	
Carbon tetrachloride	ND	ug/kg	30.9	1		12/12/17 19:34	56-23-5	
Chlorobenzene	ND	ug/kg	30.9	1		12/12/17 19:34	108-90-7	
Chloroethane	ND	ug/kg	61.7	1		12/12/17 19:34	75-00-3	
Chloroform	ND	ug/kg	30.9	1		12/12/17 19:34	67-66-3	
Chloromethane	ND	ug/kg	61.7	1		12/12/17 19:34	74-87-3	
2-Chlorotoluene	ND	ug/kg	30.9	1		12/12/17 19:34	95-49-8	
4-Chlorotoluene	ND	ug/kg	30.9	1		12/12/17 19:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	30.9	1		12/12/17 19:34	96-12-8	
Dibromochloromethane	ND	ug/kg	30.9	1		12/12/17 19:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	30.9	1		12/12/17 19:34	106-93-4	
Dibromomethane	ND	ug/kg	30.9	1		12/12/17 19:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	30.9	1		12/12/17 19:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	30.9	1		12/12/17 19:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	30.9	1		12/12/17 19:34	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	61.7	1		12/12/17 19:34	75-71-8	
1,1-Dichloroethane	ND	ug/kg	30.9	1		12/12/17 19:34	75-34-3	
1,2-Dichloroethane	ND	ug/kg	30.9	1		12/12/17 19:34	107-06-2	
1,1-Dichloroethene	ND	ug/kg	30.9	1		12/12/17 19:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	30.9	1		12/12/17 19:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	30.9	1		12/12/17 19:34	156-60-5	
1,2-Dichloropropane	ND	ug/kg	30.9	1		12/12/17 19:34	78-87-5	
1,3-Dichloropropane	ND	ug/kg	30.9	1		12/12/17 19:34	142-28-9	
2,2-Dichloropropane	ND	ug/kg	30.9	1		12/12/17 19:34	594-20-7	
1,1-Dichloropropene	ND	ug/kg	30.9	1		12/12/17 19:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	30.9	1		12/12/17 19:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	30.9	1		12/12/17 19:34	10061-02-6	
Diisopropyl ether	ND	ug/kg	30.9	1		12/12/17 19:34	108-20-3	
Ethylbenzene	ND	ug/kg	30.9	1		12/12/17 19:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	30.9	1		12/12/17 19:34	87-68-3	
2-Hexanone	ND	ug/kg	309	1		12/12/17 19:34	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	30.9	1		12/12/17 19:34	98-82-8	
p-Isopropyltoluene	ND	ug/kg	30.9	1		12/12/17 19:34	99-87-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-7-L Lab ID: 92366220006 Collected: 12/07/17 09:30 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	123	1		12/12/17 19:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	309	1		12/12/17 19:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	30.9	1		12/12/17 19:34	1634-04-4	
Naphthalene	ND	ug/kg	30.9	1		12/12/17 19:34	91-20-3	
n-Propylbenzene	ND	ug/kg	30.9	1		12/12/17 19:34	103-65-1	
Styrene	ND	ug/kg	30.9	1		12/12/17 19:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	30.9	1		12/12/17 19:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	30.9	1		12/12/17 19:34	79-34-5	
Tetrachloroethane	ND	ug/kg	30.9	1		12/12/17 19:34	127-18-4	
Toluene	ND	ug/kg	30.9	1		12/12/17 19:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	30.9	1		12/12/17 19:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	30.9	1		12/12/17 19:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	30.9	1		12/12/17 19:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	30.9	1		12/12/17 19:34	79-00-5	
Trichloroethene	ND	ug/kg	30.9	1		12/12/17 19:34	79-01-6	
Trichlorofluoromethane	ND	ug/kg	30.9	1		12/12/17 19:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	30.9	1		12/12/17 19:34	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	30.9	1		12/12/17 19:34	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	30.9	1		12/12/17 19:34	108-67-8	
Vinyl acetate	ND	ug/kg	309	1		12/12/17 19:34	108-05-4	
Vinyl chloride	ND	ug/kg	61.7	1		12/12/17 19:34	75-01-4	
Xylene (Total)	ND	ug/kg	61.7	1		12/12/17 19:34	1330-20-7	
m&p-Xylene	ND	ug/kg	61.7	1		12/12/17 19:34	179601-23-1	
o-Xylene	ND	ug/kg	30.9	1		12/12/17 19:34	95-47-6	
Surrogates								
Toluene-d8 (S)	102	%	70-130	1		12/12/17 19:34	2037-26-5	1g
4-Bromofluorobenzene (S)	97	%	70-130	1		12/12/17 19:34	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	70-132	1		12/12/17 19:34	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	83.8	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	> 200.0	deg F	70.0	1		12/13/17 22:30		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.1	Std. Units	0.10	1		12/11/17 15:00		H1
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	12000	mg/kg	552	50		12/14/17 03:15		
Nitrogen, Nitrite	612	mg/kg	276	50		12/14/17 03:15		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	6.1	1	12/12/17 12:50	12/13/17 02:54		

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-7-L Lab ID: 92366220006 Collected: 12/07/17 09:30 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide		Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2						
Sulfide, Reactive	ND	mg/kg	61.3	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days		Analytical Method: EPA 9056A						
Chloride	1170	mg/kg	309	1		12/17/17 23:02	16887-00-6	
Sulfate	ND	mg/kg	309	1		12/17/17 23:02	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92366220

Sample: G-4-U Lab ID: 92366220007 Collected: 12/07/17 10:00 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:52	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 11:52	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:52	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:52	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 11:52	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 11:52	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 11:52	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	80	%	10-138	1	12/16/17 09:28	12/18/17 11:52	2051-24-3	
Tetrachloro-m-xylene (S)	87	%	10-110	1	12/16/17 09:28	12/18/17 11:52	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 14:52	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 14:52	93-72-1	
Surrogates								
2,4-DCAA (S)	90	%	39-139	1	12/26/17 16:42	12/28/17 14:52	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	ND	mg/kg	537	100	12/12/17 12:45	12/19/17 09:35	7440-38-2	
Barium	ND	mg/kg	268	100	12/12/17 12:45	12/19/17 09:35	7440-39-3	
Cadmium	ND	mg/kg	53.7	100	12/12/17 12:45	12/19/17 09:35	7440-43-9	
Calcium	56000	mg/kg	5370	100	12/12/17 12:45	12/19/17 09:35	7440-70-2	
Chromium	ND	mg/kg	268	100	12/12/17 12:45	12/19/17 09:35	7440-47-3	
Cobalt	ND	mg/kg	268	100	12/12/17 12:45	12/19/17 09:35	7440-48-4	
Lead	ND	mg/kg	268	100	12/12/17 12:45	12/19/17 09:35	7439-92-1	
Magnesium	113000	mg/kg	5370	100	12/12/17 12:45	12/19/17 09:35	7439-95-4	
Manganese	50500	mg/kg	268	100	12/12/17 12:45	12/19/17 09:35	7439-96-5	
Selenium	ND	mg/kg	537	100	12/12/17 12:45	12/19/17 09:35	7782-49-2	
Silver	ND	mg/kg	268	100	12/12/17 12:45	12/19/17 09:35	7440-22-4	
Sodium	ND	mg/kg	268000	100	12/12/17 12:45	12/19/17 09:35	7440-23-5	
Zinc	88100	mg/kg	537	100	12/12/17 12:45	12/19/17 09:35	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.46; Final pH: 5								
Arsenic	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:18	7440-38-2	
Barium	ND	mg/L	0.25	1	12/17/17 11:45	12/19/17 05:18	7440-39-3	
Cadmium	0.020	mg/L	0.0050	1	12/17/17 11:45	12/19/17 05:18	7440-43-9	
Chromium	0.062	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:18	7440-47-3	
Lead	0.072	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:18	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 05:18	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:18	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.46; Final pH: 5								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:50	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING

Pace Project No.: 92366220

Sample: G-4-U Lab ID: 92366220007 Collected: 12/07/17 10:00 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	ND	mg/kg	0.023	1	12/13/17 16:34	12/14/17 19:13	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	622	1		12/12/17 19:54	67-64-1	
Benzene	ND	ug/kg	31.1	1		12/12/17 19:54	71-43-2	
Bromobenzene	ND	ug/kg	31.1	1		12/12/17 19:54	108-86-1	
Bromochloromethane	ND	ug/kg	31.1	1		12/12/17 19:54	74-97-5	
Bromodichloromethane	ND	ug/kg	31.1	1		12/12/17 19:54	75-27-4	
Bromoform	ND	ug/kg	31.1	1		12/12/17 19:54	75-25-2	
Bromomethane	ND	ug/kg	62.2	1		12/12/17 19:54	74-83-9	
2-Butanone (MEK)	ND	ug/kg	622	1		12/12/17 19:54	78-93-3	
n-Butylbenzene	ND	ug/kg	31.1	1		12/12/17 19:54	104-51-8	
sec-Butylbenzene	ND	ug/kg	31.1	1		12/12/17 19:54	135-98-8	
tert-Butylbenzene	ND	ug/kg	31.1	1		12/12/17 19:54	98-06-6	
Carbon tetrachloride	ND	ug/kg	31.1	1		12/12/17 19:54	56-23-5	
Chlorobenzene	ND	ug/kg	31.1	1		12/12/17 19:54	108-90-7	
Chloroethane	ND	ug/kg	62.2	1		12/12/17 19:54	75-00-3	
Chloroform	ND	ug/kg	31.1	1		12/12/17 19:54	67-66-3	
Chloromethane	ND	ug/kg	62.2	1		12/12/17 19:54	74-87-3	
2-Chlorotoluene	ND	ug/kg	31.1	1		12/12/17 19:54	95-49-8	
4-Chlorotoluene	ND	ug/kg	31.1	1		12/12/17 19:54	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	31.1	1		12/12/17 19:54	96-12-8	
Dibromochloromethane	ND	ug/kg	31.1	1		12/12/17 19:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	31.1	1		12/12/17 19:54	106-93-4	
Dibromomethane	ND	ug/kg	31.1	1		12/12/17 19:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	31.1	1		12/12/17 19:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	31.1	1		12/12/17 19:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	31.1	1		12/12/17 19:54	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	62.2	1		12/12/17 19:54	75-71-8	
1,1-Dichloroethane	ND	ug/kg	31.1	1		12/12/17 19:54	75-34-3	
1,2-Dichloroethane	ND	ug/kg	31.1	1		12/12/17 19:54	107-06-2	
1,1-Dichloroethene	ND	ug/kg	31.1	1		12/12/17 19:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	31.1	1		12/12/17 19:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	31.1	1		12/12/17 19:54	156-60-5	
1,2-Dichloropropane	ND	ug/kg	31.1	1		12/12/17 19:54	78-87-5	
1,3-Dichloropropane	ND	ug/kg	31.1	1		12/12/17 19:54	142-28-9	
2,2-Dichloropropane	ND	ug/kg	31.1	1		12/12/17 19:54	594-20-7	
1,1-Dichloropropene	ND	ug/kg	31.1	1		12/12/17 19:54	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	31.1	1		12/12/17 19:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	31.1	1		12/12/17 19:54	10061-02-6	
Diisopropyl ether	ND	ug/kg	31.1	1		12/12/17 19:54	108-20-3	
Ethylbenzene	ND	ug/kg	31.1	1		12/12/17 19:54	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	31.1	1		12/12/17 19:54	87-68-3	
2-Hexanone	ND	ug/kg	311	1		12/12/17 19:54	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	31.1	1		12/12/17 19:54	98-82-8	
p-Isopropyltoluene	ND	ug/kg	31.1	1		12/12/17 19:54	99-87-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-4-U Lab ID: 92366220007 Collected: 12/07/17 10:00 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	124	1		12/12/17 19:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	311	1		12/12/17 19:54	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	31.1	1		12/12/17 19:54	1634-04-4	
Naphthalene	ND	ug/kg	31.1	1		12/12/17 19:54	91-20-3	
n-Propylbenzene	ND	ug/kg	31.1	1		12/12/17 19:54	103-65-1	
Styrene	ND	ug/kg	31.1	1		12/12/17 19:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	31.1	1		12/12/17 19:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	31.1	1		12/12/17 19:54	79-34-5	
Tetrachloroethene	ND	ug/kg	31.1	1		12/12/17 19:54	127-18-4	
Toluene	ND	ug/kg	31.1	1		12/12/17 19:54	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	31.1	1		12/12/17 19:54	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	31.1	1		12/12/17 19:54	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	31.1	1		12/12/17 19:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	31.1	1		12/12/17 19:54	79-00-5	
Trichloroethene	ND	ug/kg	31.1	1		12/12/17 19:54	79-01-6	
Trichlorofluoromethane	ND	ug/kg	31.1	1		12/12/17 19:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	31.1	1		12/12/17 19:54	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	31.1	1		12/12/17 19:54	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	31.1	1		12/12/17 19:54	108-67-8	
Vinyl acetate	ND	ug/kg	311	1		12/12/17 19:54	108-05-4	
Vinyl chloride	ND	ug/kg	62.2	1		12/12/17 19:54	75-01-4	
Xylene (Total)	ND	ug/kg	62.2	1		12/12/17 19:54	1330-20-7	
m&p-Xylene	ND	ug/kg	62.2	1		12/12/17 19:54	179601-23-1	
o-Xylene	ND	ug/kg	31.1	1		12/12/17 19:54	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1		12/12/17 19:54	2037-26-5	1g
4-Bromofluorobenzene (S)	100	%	70-130	1		12/12/17 19:54	460-00-4	
1,2-Dichloroethane-d4 (S)	90	%	70-132	1		12/12/17 19:54	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	83.9	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/14/17 09:30		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.1	Std. Units	0.10	1		12/11/17 15:00		H1
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	7810	mg/kg	603	50		12/14/17 03:17		
Nitrogen, Nitrite	ND	mg/kg	302	50		12/14/17 03:17		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	6.2	1	12/12/17 12:50	12/13/17 02:55		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-4-U Lab ID: 92366220007 Collected: 12/07/17 10:00 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide		Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2						
Sulfide, Reactive	ND	mg/kg	62.2	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days		Analytical Method: EPA 9056A						
Chloride	1410	mg/kg	311	1		12/17/17 23:53	16887-00-6	
Sulfate	ND	mg/kg	311	1		12/17/17 23:53	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-4-L Lab ID: 92366220008 Collected: 12/07/17 10:00 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:10	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 12:10	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:10	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:10	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:10	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 12:10	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 12:10	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	64	%	10-138	1	12/16/17 09:28	12/18/17 12:10	2051-24-3	
Tetrachloro-m-xylene (S)	65	%	10-110	1	12/16/17 09:28	12/18/17 12:10	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 15:16	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 15:16	93-72-1	
Surrogates								
2,4-DCAA (S)	89	%	39-139	1	12/26/17 16:42	12/28/17 15:16	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	648	mg/kg	507	100	12/12/17 12:45	12/19/17 09:39	7440-38-2	
Barium	ND	mg/kg	253	100	12/12/17 12:45	12/19/17 09:39	7440-39-3	
Cadmium	84.1	mg/kg	50.7	100	12/12/17 12:45	12/19/17 09:39	7440-43-9	
Calcium	61100	mg/kg	5070	100	12/12/17 12:45	12/19/17 09:39	7440-70-2	
Chromium	533	mg/kg	253	100	12/12/17 12:45	12/19/17 09:39	7440-47-3	
Cobalt	ND	mg/kg	253	100	12/12/17 12:45	12/19/17 09:39	7440-48-4	
Lead	1030	mg/kg	253	100	12/12/17 12:45	12/19/17 09:39	7439-92-1	
Magnesium	87500	mg/kg	5070	100	12/12/17 12:45	12/19/17 09:39	7439-95-4	
Manganese	27100	mg/kg	253	100	12/12/17 12:45	12/19/17 09:39	7439-96-5	
Selenium	ND	mg/kg	507	100	12/12/17 12:45	12/19/17 09:39	7782-49-2	
Silver	ND	mg/kg	253	100	12/12/17 12:45	12/19/17 09:39	7440-22-4	
Sodium	ND	mg/kg	253000	100	12/12/17 12:45	12/19/17 09:39	7440-23-5	
Zinc	108000	mg/kg	507	100	12/12/17 12:45	12/19/17 09:39	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.37; Final pH: 4.5								
Arsenic	0.32	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:24	7440-38-2	
Barium	0.71	mg/L	0.25	1	12/17/17 11:45	12/19/17 05:24	7440-39-3	
Cadmium	0.59	mg/L	0.0050	1	12/17/17 11:45	12/19/17 05:24	7440-43-9	
Chromium	0.22	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:24	7440-47-3	
Lead	0.21	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:24	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 05:24	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:24	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.37; Final pH: 4.5								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:52	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-4-L Lab ID: 92366220008 Collected: 12/07/17 10:00 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.16	mg/kg	0.021	1	12/13/17 16:34	12/14/17 19:16	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	689	1		12/12/17 20:15	67-64-1	
Benzene	ND	ug/kg	34.4	1		12/12/17 20:15	71-43-2	
Bromobenzene	ND	ug/kg	34.4	1		12/12/17 20:15	108-86-1	
Bromochloromethane	ND	ug/kg	34.4	1		12/12/17 20:15	74-97-5	
Bromodichloromethane	ND	ug/kg	34.4	1		12/12/17 20:15	75-27-4	
Bromoform	ND	ug/kg	34.4	1		12/12/17 20:15	75-25-2	
Bromomethane	ND	ug/kg	68.9	1		12/12/17 20:15	74-83-9	
2-Butanone (MEK)	ND	ug/kg	689	1		12/12/17 20:15	78-93-3	
n-Butylbenzene	ND	ug/kg	34.4	1		12/12/17 20:15	104-51-8	
sec-Butylbenzene	ND	ug/kg	34.4	1		12/12/17 20:15	135-98-8	
tert-Butylbenzene	ND	ug/kg	34.4	1		12/12/17 20:15	98-06-6	
Carbon tetrachloride	ND	ug/kg	34.4	1		12/12/17 20:15	56-23-5	
Chlorobenzene	ND	ug/kg	34.4	1		12/12/17 20:15	108-90-7	
Chloroethane	ND	ug/kg	68.9	1		12/12/17 20:15	75-00-3	
Chloroform	ND	ug/kg	34.4	1		12/12/17 20:15	67-66-3	
Chloromethane	ND	ug/kg	68.9	1		12/12/17 20:15	74-87-3	
2-Chlorotoluene	ND	ug/kg	34.4	1		12/12/17 20:15	95-49-8	
4-Chlorotoluene	ND	ug/kg	34.4	1		12/12/17 20:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	34.4	1		12/12/17 20:15	96-12-8	
Dibromochloromethane	ND	ug/kg	34.4	1		12/12/17 20:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	34.4	1		12/12/17 20:15	106-93-4	
Dibromomethane	ND	ug/kg	34.4	1		12/12/17 20:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	34.4	1		12/12/17 20:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	34.4	1		12/12/17 20:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	34.4	1		12/12/17 20:15	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	68.9	1		12/12/17 20:15	75-71-8	
1,1-Dichloroethane	ND	ug/kg	34.4	1		12/12/17 20:15	75-34-3	
1,2-Dichloroethane	ND	ug/kg	34.4	1		12/12/17 20:15	107-06-2	
1,1-Dichloroethene	ND	ug/kg	34.4	1		12/12/17 20:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	34.4	1		12/12/17 20:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	34.4	1		12/12/17 20:15	156-60-5	
1,2-Dichloropropane	ND	ug/kg	34.4	1		12/12/17 20:15	78-87-5	
1,3-Dichloropropane	ND	ug/kg	34.4	1		12/12/17 20:15	142-28-9	
2,2-Dichloropropane	ND	ug/kg	34.4	1		12/12/17 20:15	594-20-7	
1,1-Dichloropropene	ND	ug/kg	34.4	1		12/12/17 20:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	34.4	1		12/12/17 20:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	34.4	1		12/12/17 20:15	10061-02-6	
Diisopropyl ether	ND	ug/kg	34.4	1		12/12/17 20:15	108-20-3	
Ethylbenzene	ND	ug/kg	34.4	1		12/12/17 20:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	34.4	1		12/12/17 20:15	87-68-3	
2-Hexanone	ND	ug/kg	344	1		12/12/17 20:15	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	34.4	1		12/12/17 20:15	98-82-8	
p-Isopropyltoluene	ND	ug/kg	34.4	1		12/12/17 20:15	99-87-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-4-L Lab ID: 92366220008 Collected: 12/07/17 10:00 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	138	1		12/12/17 20:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	344	1		12/12/17 20:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	34.4	1		12/12/17 20:15	1634-04-4	
Naphthalene	ND	ug/kg	34.4	1		12/12/17 20:15	91-20-3	
n-Propylbenzene	ND	ug/kg	34.4	1		12/12/17 20:15	103-65-1	
Styrene	ND	ug/kg	34.4	1		12/12/17 20:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	34.4	1		12/12/17 20:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	34.4	1		12/12/17 20:15	79-34-5	
Tetrachloroethene	ND	ug/kg	34.4	1		12/12/17 20:15	127-18-4	
Toluene	ND	ug/kg	34.4	1		12/12/17 20:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	34.4	1		12/12/17 20:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	34.4	1		12/12/17 20:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	34.4	1		12/12/17 20:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	34.4	1		12/12/17 20:15	79-00-5	
Trichloroethene	ND	ug/kg	34.4	1		12/12/17 20:15	79-01-6	
Trichlorofluoromethane	ND	ug/kg	34.4	1		12/12/17 20:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	34.4	1		12/12/17 20:15	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	34.4	1		12/12/17 20:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	34.4	1		12/12/17 20:15	108-67-8	
Vinyl acetate	ND	ug/kg	344	1		12/12/17 20:15	108-05-4	
Vinyl chloride	ND	ug/kg	68.9	1		12/12/17 20:15	75-01-4	
Xylene (Total)	ND	ug/kg	68.9	1		12/12/17 20:15	1330-20-7	
m&p-Xylene	ND	ug/kg	68.9	1		12/12/17 20:15	179601-23-1	
o-Xylene	ND	ug/kg	34.4	1		12/12/17 20:15	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	70-130	1		12/12/17 20:15	2037-26-5	1g
4-Bromofluorobenzene (S)	97	%	70-130	1		12/12/17 20:15	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-132	1		12/12/17 20:15	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	85.5	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/14/17 09:30		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.0	Std. Units	0.10	1		12/11/17 15:00		H1
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	10100	mg/kg	616	50		12/14/17 03:18		
Nitrogen, Nitrite	374	mg/kg	308	50		12/14/17 03:18		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	6.9	1	12/12/17 12:50	12/13/17 02:55		

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-4-L Lab ID: 92366220008 Collected: 12/07/17 10:00 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide								
Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2								
Sulfide, Reactive	ND	mg/kg	68.6	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days								
Analytical Method: EPA 9056A								
Chloride	1670	mg/kg	344	1		12/18/17 00:10	16887-00-6	
Sulfate	ND	mg/kg	344	1		12/18/17 00:10	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-1-U Lab ID: 92366220009 Collected: 12/07/17 10:45 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:28	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 12:28	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:28	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:28	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:28	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 12:28	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 12:28	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	69	%	10-138	1	12/16/17 09:28	12/18/17 12:28	2051-24-3	
Tetrachloro-m-xylene (S)	78	%	10-110	1	12/16/17 09:28	12/18/17 12:28	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 15:41	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 15:41	93-72-1	
Surrogates								
2,4-DCAA (S)	77	%	39-139	1	12/26/17 16:42	12/28/17 15:41	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	513	mg/kg	359	100	12/12/17 12:45	12/19/17 09:43	7440-38-2	
Barium	ND	mg/kg	179	100	12/12/17 12:45	12/19/17 09:43	7440-39-3	
Cadmium	ND	mg/kg	35.9	100	12/12/17 12:45	12/19/17 09:43	7440-43-9	
Calcium	62300	mg/kg	3590	100	12/12/17 12:45	12/19/17 09:43	7440-70-2	
Chromium	1150	mg/kg	179	100	12/12/17 12:45	12/19/17 09:43	7440-47-3	
Cobalt	ND	mg/kg	179	100	12/12/17 12:45	12/19/17 09:43	7440-48-4	
Lead	ND	mg/kg	179	100	12/12/17 12:45	12/19/17 09:43	7439-92-1	
Magnesium	101000	mg/kg	3590	100	12/12/17 12:45	12/19/17 09:43	7439-95-4	
Manganese	60900	mg/kg	179	100	12/12/17 12:45	12/19/17 09:43	7439-96-5	
Selenium	ND	mg/kg	359	100	12/12/17 12:45	12/19/17 09:43	7782-49-2	
Silver	ND	mg/kg	179	100	12/12/17 12:45	12/19/17 09:43	7440-22-4	
Sodium	ND	mg/kg	179000	100	12/12/17 12:45	12/19/17 09:43	7440-23-5	
Zinc	77200	mg/kg	359	100	12/12/17 12:45	12/19/17 09:43	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.43; Final pH: 5.5								
Arsenic	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:30	7440-38-2	
Barium	0.85	mg/L	0.25	1	12/17/17 11:45	12/19/17 05:30	7440-39-3	
Cadmium	0.066	mg/L	0.0050	1	12/17/17 11:45	12/19/17 05:30	7440-43-9	
Chromium	0.21	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:30	7440-47-3	
Lead	0.064	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:30	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 05:30	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:30	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.43; Final pH: 5.5								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:54	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-1-U Lab ID: 92366220009 Collected: 12/07/17 10:45 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.099	mg/kg	0.017	1	12/13/17 16:34	12/14/17 19:18	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	538	1		12/12/17 20:35	67-64-1	
Benzene	144	ug/kg	26.9	1		12/12/17 20:35	71-43-2	
Bromobenzene	ND	ug/kg	26.9	1		12/12/17 20:35	108-86-1	
Bromochloromethane	ND	ug/kg	26.9	1		12/12/17 20:35	74-97-5	
Bromodichloromethane	ND	ug/kg	26.9	1		12/12/17 20:35	75-27-4	
Bromoform	ND	ug/kg	26.9	1		12/12/17 20:35	75-25-2	
Bromomethane	ND	ug/kg	53.8	1		12/12/17 20:35	74-83-9	
2-Butanone (MEK)	ND	ug/kg	538	1		12/12/17 20:35	78-93-3	
n-Butylbenzene	ND	ug/kg	26.9	1		12/12/17 20:35	104-51-8	
sec-Butylbenzene	ND	ug/kg	26.9	1		12/12/17 20:35	135-98-8	
tert-Butylbenzene	ND	ug/kg	26.9	1		12/12/17 20:35	98-06-6	
Carbon tetrachloride	ND	ug/kg	26.9	1		12/12/17 20:35	56-23-5	
Chlorobenzene	ND	ug/kg	26.9	1		12/12/17 20:35	108-90-7	
Chloroethane	ND	ug/kg	53.8	1		12/12/17 20:35	75-00-3	
Chloroform	ND	ug/kg	26.9	1		12/12/17 20:35	67-66-3	
Chloromethane	ND	ug/kg	53.8	1		12/12/17 20:35	74-87-3	
2-Chlorotoluene	ND	ug/kg	26.9	1		12/12/17 20:35	95-49-8	
4-Chlorotoluene	ND	ug/kg	26.9	1		12/12/17 20:35	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	26.9	1		12/12/17 20:35	96-12-8	
Dibromochloromethane	ND	ug/kg	26.9	1		12/12/17 20:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	26.9	1		12/12/17 20:35	106-93-4	
Dibromomethane	ND	ug/kg	26.9	1		12/12/17 20:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	26.9	1		12/12/17 20:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	26.9	1		12/12/17 20:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	26.9	1		12/12/17 20:35	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	53.8	1		12/12/17 20:35	75-71-8	
1,1-Dichloroethane	ND	ug/kg	26.9	1		12/12/17 20:35	75-34-3	
1,2-Dichloroethane	ND	ug/kg	26.9	1		12/12/17 20:35	107-06-2	
1,1-Dichloroethene	ND	ug/kg	26.9	1		12/12/17 20:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	26.9	1		12/12/17 20:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	26.9	1		12/12/17 20:35	156-60-5	
1,2-Dichloropropane	ND	ug/kg	26.9	1		12/12/17 20:35	78-87-5	
1,3-Dichloropropane	ND	ug/kg	26.9	1		12/12/17 20:35	142-28-9	
2,2-Dichloropropane	ND	ug/kg	26.9	1		12/12/17 20:35	594-20-7	
1,1-Dichloropropene	ND	ug/kg	26.9	1		12/12/17 20:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	26.9	1		12/12/17 20:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	26.9	1		12/12/17 20:35	10061-02-6	
Diisopropyl ether	ND	ug/kg	26.9	1		12/12/17 20:35	108-20-3	
Ethylbenzene	ND	ug/kg	26.9	1		12/12/17 20:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	26.9	1		12/12/17 20:35	87-68-3	
2-Hexanone	ND	ug/kg	269	1		12/12/17 20:35	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	26.9	1		12/12/17 20:35	98-82-8	
p-Isopropyltoluene	ND	ug/kg	26.9	1		12/12/17 20:35	99-87-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-1-U Lab ID: 92366220009 Collected: 12/07/17 10:45 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	108	1		12/12/17 20:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	269	1		12/12/17 20:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	26.9	1		12/12/17 20:35	1634-04-4	
Naphthalene	ND	ug/kg	26.9	1		12/12/17 20:35	91-20-3	
n-Propylbenzene	ND	ug/kg	26.9	1		12/12/17 20:35	103-65-1	
Styrene	ND	ug/kg	26.9	1		12/12/17 20:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	26.9	1		12/12/17 20:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	26.9	1		12/12/17 20:35	79-34-5	
Tetrachloroethane	ND	ug/kg	26.9	1		12/12/17 20:35	127-18-4	
Toluene	ND	ug/kg	26.9	1		12/12/17 20:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	26.9	1		12/12/17 20:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	26.9	1		12/12/17 20:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	26.9	1		12/12/17 20:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	26.9	1		12/12/17 20:35	79-00-5	
Trichloroethene	ND	ug/kg	26.9	1		12/12/17 20:35	79-01-6	
Trichlorofluoromethane	ND	ug/kg	26.9	1		12/12/17 20:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	26.9	1		12/12/17 20:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	26.9	1		12/12/17 20:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	26.9	1		12/12/17 20:35	108-67-8	
Vinyl acetate	ND	ug/kg	269	1		12/12/17 20:35	108-05-4	
Vinyl chloride	ND	ug/kg	53.8	1		12/12/17 20:35	75-01-4	
Xylene (Total)	ND	ug/kg	53.8	1		12/12/17 20:35	1330-20-7	
m&p-Xylene	ND	ug/kg	53.8	1		12/12/17 20:35	179601-23-1	
o-Xylene	ND	ug/kg	26.9	1		12/12/17 20:35	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	70-130	1		12/12/17 20:35	2037-26-5	1g
4-Bromofluorobenzene (S)	97	%	70-130	1		12/12/17 20:35	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-132	1		12/12/17 20:35	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	81.4	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/14/17 09:30		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.2	Std. Units	0.10	1		12/11/17 15:00		H1
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	7150	mg/kg	488	50		12/14/17 03:19		
Nitrogen, Nitrite	ND	mg/kg	244	50		12/14/17 03:19		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	5.4	1	12/12/17 12:50	12/13/17 02:59		

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-1-U Lab ID: 92366220009 Collected: 12/07/17 10:45 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide		Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2						
Sulfide, Reactive	ND	mg/kg	53.8	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days		Analytical Method: EPA 9056A						
Chloride	1050	mg/kg	269	1		12/18/17 00:27	16887-00-6	
Sulfate	ND	mg/kg	269	1		12/18/17 00:27	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-1-L Lab ID: 92366220010 Collected: 12/07/17 10:45 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8081 GCS Pesticides, TCLP								
Analytical Method: EPA 8081 Preparation Method: EPA 3510								
Leachate Method/Date: EPA 1311; 12/15/17 15:40								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:47	58-89-9	
Chlordane (Technical)	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 12:47	57-74-9	
Endrin	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:47	72-20-8	
Heptachlor	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:47	76-44-8	
Heptachlor epoxide	ND	ug/L	0.50	1	12/16/17 09:28	12/18/17 12:47	1024-57-3	
Methoxychlor	ND	ug/L	1000	1	12/16/17 09:28	12/18/17 12:47	72-43-5	
Toxaphene	ND	ug/L	3.0	1	12/16/17 09:28	12/18/17 12:47	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	63	%	10-138	1	12/16/17 09:28	12/18/17 12:47	2051-24-3	
Tetrachloro-m-xylene (S)	63	%	10-110	1	12/16/17 09:28	12/18/17 12:47	877-09-8	
8151 Chlorinate Herbicide TCLP								
Analytical Method: EPA 8151 Preparation Method: EPA 3510								
2,4-D	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 16:06	94-75-7	
2,4,5-TP (Silvex)	ND	mg/L	0.010	1	12/26/17 16:42	12/28/17 16:06	93-72-1	
Surrogates								
2,4-DCAA (S)	70	%	39-139	1	12/26/17 16:42	12/28/17 16:06	19719-28-9	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Arsenic	1060	mg/kg	459	100	12/12/17 12:45	12/19/17 09:48	7440-38-2	
Barium	ND	mg/kg	230	100	12/12/17 12:45	12/19/17 09:48	7440-39-3	
Cadmium	ND	mg/kg	45.9	100	12/12/17 12:45	12/19/17 09:48	7440-43-9	
Calcium	65600	mg/kg	4590	100	12/12/17 12:45	12/19/17 09:48	7440-70-2	
Chromium	4000	mg/kg	230	100	12/12/17 12:45	12/19/17 09:48	7440-47-3	
Cobalt	ND	mg/kg	230	100	12/12/17 12:45	12/19/17 09:48	7440-48-4	
Lead	ND	mg/kg	230	100	12/12/17 12:45	12/19/17 09:48	7439-92-1	
Magnesium	82400	mg/kg	4590	100	12/12/17 12:45	12/19/17 09:48	7439-95-4	
Manganese	49700	mg/kg	230	100	12/12/17 12:45	12/19/17 09:48	7439-96-5	
Selenium	ND	mg/kg	459	100	12/12/17 12:45	12/19/17 09:48	7782-49-2	
Silver	ND	mg/kg	230	100	12/12/17 12:45	12/19/17 09:48	7440-22-4	
Sodium	ND	mg/kg	230000	100	12/12/17 12:45	12/19/17 09:48	7440-23-5	
Zinc	69800	mg/kg	459	100	12/12/17 12:45	12/19/17 09:48	7440-66-6	
6010 MET ICP, TCLP								
Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.29; Final pH: 6								
Arsenic	ND	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:37	7440-38-2	
Barium	0.42	mg/L	0.25	1	12/17/17 11:45	12/19/17 05:37	7440-39-3	
Cadmium	ND	mg/L	0.0050	1	12/17/17 11:45	12/19/17 05:37	7440-43-9	
Chromium	0.057	mg/L	0.050	1	12/17/17 11:45	12/19/17 05:37	7440-47-3	
Lead	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:37	7439-92-1	
Selenium	ND	mg/L	0.10	1	12/17/17 11:45	12/19/17 05:37	7782-49-2	
Silver	ND	mg/L	0.025	1	12/17/17 11:45	12/19/17 05:37	7440-22-4	L2
7470 Mercury, TCLP								
Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Leachate Method/Date: EPA 1311; 12/16/17 15:00 Initial pH: 9.29; Final pH: 6								
Mercury	ND	mg/L	0.00020	1	12/17/17 21:14	12/18/17 13:57	7439-97-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-1-L Lab ID: 92366220010 Collected: 12/07/17 10:45 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7471 Mercury		Analytical Method: EPA 7471 Preparation Method: EPA 7471						
Mercury	0.12	mg/kg	0.022	1	12/13/17 16:34	12/14/17 19:20	7439-97-6	
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Acetone	ND	ug/kg	524	1		12/12/17 20:56	67-64-1	
Benzene	138	ug/kg	26.2	1		12/12/17 20:56	71-43-2	
Bromobenzene	ND	ug/kg	26.2	1		12/12/17 20:56	108-86-1	
Bromochloromethane	ND	ug/kg	26.2	1		12/12/17 20:56	74-97-5	
Bromodichloromethane	ND	ug/kg	26.2	1		12/12/17 20:56	75-27-4	
Bromoform	ND	ug/kg	26.2	1		12/12/17 20:56	75-25-2	
Bromomethane	ND	ug/kg	52.4	1		12/12/17 20:56	74-83-9	
2-Butanone (MEK)	ND	ug/kg	524	1		12/12/17 20:56	78-93-3	
n-Butylbenzene	ND	ug/kg	26.2	1		12/12/17 20:56	104-51-8	
sec-Butylbenzene	ND	ug/kg	26.2	1		12/12/17 20:56	135-98-8	
tert-Butylbenzene	ND	ug/kg	26.2	1		12/12/17 20:56	98-06-6	
Carbon tetrachloride	ND	ug/kg	26.2	1		12/12/17 20:56	56-23-5	
Chlorobenzene	ND	ug/kg	26.2	1		12/12/17 20:56	108-90-7	
Chloroethane	ND	ug/kg	52.4	1		12/12/17 20:56	75-00-3	
Chloroform	ND	ug/kg	26.2	1		12/12/17 20:56	67-66-3	
Chloromethane	ND	ug/kg	52.4	1		12/12/17 20:56	74-87-3	
2-Chlorotoluene	ND	ug/kg	26.2	1		12/12/17 20:56	95-49-8	
4-Chlorotoluene	ND	ug/kg	26.2	1		12/12/17 20:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	26.2	1		12/12/17 20:56	96-12-8	
Dibromochloromethane	ND	ug/kg	26.2	1		12/12/17 20:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	26.2	1		12/12/17 20:56	106-93-4	
Dibromomethane	ND	ug/kg	26.2	1		12/12/17 20:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	26.2	1		12/12/17 20:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	26.2	1		12/12/17 20:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	26.2	1		12/12/17 20:56	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	52.4	1		12/12/17 20:56	75-71-8	
1,1-Dichloroethane	ND	ug/kg	26.2	1		12/12/17 20:56	75-34-3	
1,2-Dichloroethane	ND	ug/kg	26.2	1		12/12/17 20:56	107-06-2	
1,1-Dichloroethene	ND	ug/kg	26.2	1		12/12/17 20:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	26.2	1		12/12/17 20:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	26.2	1		12/12/17 20:56	156-60-5	
1,2-Dichloropropane	ND	ug/kg	26.2	1		12/12/17 20:56	78-87-5	
1,3-Dichloropropane	ND	ug/kg	26.2	1		12/12/17 20:56	142-28-9	
2,2-Dichloropropane	ND	ug/kg	26.2	1		12/12/17 20:56	594-20-7	
1,1-Dichloropropene	ND	ug/kg	26.2	1		12/12/17 20:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	26.2	1		12/12/17 20:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	26.2	1		12/12/17 20:56	10061-02-6	
Diisopropyl ether	ND	ug/kg	26.2	1		12/12/17 20:56	108-20-3	
Ethylbenzene	ND	ug/kg	26.2	1		12/12/17 20:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	26.2	1		12/12/17 20:56	87-68-3	
2-Hexanone	ND	ug/kg	262	1		12/12/17 20:56	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	26.2	1		12/12/17 20:56	98-82-8	
p-Isopropyltoluene	ND	ug/kg	26.2	1		12/12/17 20:56	99-87-6	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-1-L Lab ID: 92366220010 Collected: 12/07/17 10:45 Received: 12/07/17 16:30 Matrix: Solid
 Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level		Analytical Method: EPA 8260						
Methylene Chloride	ND	ug/kg	105	1		12/12/17 20:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	262	1		12/12/17 20:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	26.2	1		12/12/17 20:56	1634-04-4	
Naphthalene	ND	ug/kg	26.2	1		12/12/17 20:56	91-20-3	
n-Propylbenzene	ND	ug/kg	26.2	1		12/12/17 20:56	103-65-1	
Styrene	ND	ug/kg	26.2	1		12/12/17 20:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	26.2	1		12/12/17 20:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	26.2	1		12/12/17 20:56	79-34-5	
Tetrachloroethane	ND	ug/kg	26.2	1		12/12/17 20:56	127-18-4	
Toluene	ND	ug/kg	26.2	1		12/12/17 20:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	26.2	1		12/12/17 20:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	26.2	1		12/12/17 20:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	26.2	1		12/12/17 20:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	26.2	1		12/12/17 20:56	79-00-5	
Trichloroethene	ND	ug/kg	26.2	1		12/12/17 20:56	79-01-6	
Trichlorofluoromethane	ND	ug/kg	26.2	1		12/12/17 20:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	26.2	1		12/12/17 20:56	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	26.2	1		12/12/17 20:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	26.2	1		12/12/17 20:56	108-67-8	
Vinyl acetate	ND	ug/kg	262	1		12/12/17 20:56	108-05-4	
Vinyl chloride	ND	ug/kg	52.4	1		12/12/17 20:56	75-01-4	
Xylene (Total)	ND	ug/kg	52.4	1		12/12/17 20:56	1330-20-7	
m&p-Xylene	ND	ug/kg	52.4	1		12/12/17 20:56	179601-23-1	
o-Xylene	ND	ug/kg	26.2	1		12/12/17 20:56	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	70-130	1		12/12/17 20:56	2037-26-5	1g
4-Bromofluorobenzene (S)	99	%	70-130	1		12/12/17 20:56	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-132	1		12/12/17 20:56	17060-07-0	
Percent Moisture		Analytical Method: ASTM D2974-87						
Percent Moisture	80.9	%	0.10	1		12/11/17 11:03		
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010						
Flashpoint	>200	deg F	70.0	1		12/14/17 09:30		
9045 pH Soil		Analytical Method: EPA 9045						
pH at 25 Degrees C	9.1	Std. Units	0.10	1		12/11/17 15:00		H1
353.2 Nitrogen, NO2/NO3		Analytical Method: EPA 353.2						
Nitrogen, Nitrate	6950	mg/kg	502	50		12/14/17 03:20		
Nitrogen, Nitrite	ND	mg/kg	251	50		12/14/17 03:20		
733C S Reactive Cyanide		Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2						
Cyanide, Reactive	ND	mg/kg	5.2	1	12/12/17 12:50	12/13/17 03:00		

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: G-1-L Lab ID: 92366220010 Collected: 12/07/17 10:45 Received: 12/07/17 16:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
734S Reactive Sulfide		Analytical Method: SM4500S2F-00 Preparation Method: SW-846 7.3.4.2						
Sulfide, Reactive	ND	mg/kg	52.4	1	12/12/17 12:50	12/13/17 01:54		
9056 SL IC Anions 28 Days		Analytical Method: EPA 9056A						
Chloride	969	mg/kg	262	1		12/18/17 00:44	16887-00-6	
Sulfate	ND	mg/kg	262	1		12/18/17 00:44	14808-79-8	

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ANALYTICAL RESULTS

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Sample: **SLUDGE EQUIPMENT BLANK** Lab ID: **92366220011** Collected: 12/07/17 16:15 Received: 12/07/17 16:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Aluminum	ND	ug/L	100	1	12/12/17 03:40	12/18/17 03:38	7429-90-5	
Antimony	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-36-0	
Arsenic	ND	ug/L	10.0	1	12/12/17 03:40	12/18/17 03:38	7440-38-2	
Barium	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-39-3	
Beryllium	ND	ug/L	1.0	1	12/12/17 03:40	12/18/17 03:38	7440-41-7	
Boron	ND	ug/L	50.0	1	12/12/17 03:40	12/18/17 03:38	7440-42-8	
Cadmium	ND	ug/L	1.0	1	12/12/17 03:40	12/18/17 03:38	7440-43-9	
Calcium	ND	ug/L	100	1	12/12/17 03:40	12/18/17 03:38	7440-70-2	
Chromium	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-47-3	
Cobalt	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-48-4	
Copper	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-50-8	
Iron	ND	ug/L	50.0	1	12/12/17 03:40	12/18/17 03:38	7439-89-6	
Lead	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7439-92-1	
Magnesium	ND	ug/L	100	1	12/12/17 03:40	12/18/17 03:38	7439-95-4	
Manganese	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7439-96-5	
Molybdenum	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7439-98-7	
Nickel	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-02-0	
Potassium	ND	ug/L	5000	1	12/12/17 03:40	12/18/17 03:38	7440-09-7	
Selenium	ND	ug/L	10.0	1	12/12/17 03:40	12/18/17 03:38	7782-49-2	
Silicon	ND	ug/L	100	1	12/12/17 03:40	12/18/17 03:38	7440-21-3	
Silver	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-22-4	
Sodium	ND	ug/L	5000	1	12/12/17 03:40	12/18/17 03:38	7440-23-5	
Strontium	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-24-6	
Thallium	ND	ug/L	10.0	1	12/12/17 03:40	12/18/17 03:38	7440-28-0	
Tin	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-31-5	
Titanium	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-32-6	
Vanadium	ND	ug/L	5.0	1	12/12/17 03:40	12/18/17 03:38	7440-62-2	
Zinc	ND	ug/L	10.0	1	12/12/17 03:40	12/18/17 03:38	7440-66-6	
7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	1	12/12/17 11:03	12/13/17 16:25	7439-97-6	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0								
Bromide	ND	mg/L	0.10	1		12/11/17 08:55	24959-67-9	
Chloride	ND	mg/L	1.0	1		12/11/17 08:55	16887-00-6	
Fluoride	ND	mg/L	0.10	1		12/11/17 08:55	16984-48-8	
Sulfate	ND	mg/L	1.0	1		12/11/17 08:55	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.020	1		12/08/17 13:55		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 391263 Analysis Method: EPA 7470
 QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

METHOD BLANK: 2170953 Matrix: Water
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	12/18/17 13:21	

LABORATORY CONTROL SAMPLE: 2170954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.0025	0.0026	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2170955 2170956

Parameter	Units	2170955		2170956		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		92366220001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result					
Mercury	mg/L	ND	.0025	.0025	0.0026	0.0026	102	100	75-125	2

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 390311 Analysis Method: EPA 7470
 QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
 Associated Lab Samples: 92366220011

METHOD BLANK: 2165667 Matrix: Water
 Associated Lab Samples: 92366220011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	12/13/17 15:35	

LABORATORY CONTROL SAMPLE: 2165668

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.5	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165669 2165670

Parameter	Units	92365838001		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
Mercury	ug/L	ND	2.5	2.5	2.6	2.7	106	108	75-125	2		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 390711 Analysis Method: EPA 7471
 QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

METHOD BLANK: 2167781 Matrix: Solid
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.0060	12/14/17 18:40	

LABORATORY CONTROL SAMPLE: 2167782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.083	0.085	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2167783 2167784

Parameter	92366187001		MS Spike	MSD Spike	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	Units	Result	Conc.	Conc.							
Mercury	mg/kg	0.018	.075	.075	0.073	0.073	74	74	75-125	1	M1

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
Pace Project No.: 92366220

QC Batch: 390357 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

METHOD BLANK: 2165912 Matrix: Solid
Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/kg	ND	1.0	12/17/17 01:53	
Barium	mg/kg	ND	0.50	12/17/17 01:53	
Cadmium	mg/kg	ND	0.10	12/17/17 01:53	
Calcium	mg/kg	ND	10.0	12/17/17 01:53	
Chromium	mg/kg	ND	0.50	12/17/17 01:53	
Cobalt	mg/kg	ND	0.50	12/17/17 01:53	
Lead	mg/kg	ND	0.50	12/17/17 01:53	
Magnesium	mg/kg	ND	10.0	12/17/17 01:53	
Manganese	mg/kg	ND	0.50	12/17/17 01:53	
Selenium	mg/kg	ND	1.0	12/17/17 01:53	
Silver	mg/kg	ND	0.50	12/17/17 01:53	
Sodium	mg/kg	ND	500	12/17/17 01:53	
Zinc	mg/kg	ND	1.0	12/17/17 01:53	

LABORATORY CONTROL SAMPLE: 2165913

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/kg	50	46.4	93	80-120	
Barium	mg/kg	50	45.6	91	80-120	
Cadmium	mg/kg	50	46.9	94	80-120	
Calcium	mg/kg	500	464	93	80-120	
Chromium	mg/kg	50	47.3	95	80-120	
Cobalt	mg/kg	50	46.8	94	80-120	
Lead	mg/kg	50	46.6	93	80-120	
Magnesium	mg/kg	500	463	93	80-120	
Manganese	mg/kg	50	45.8	92	80-120	
Selenium	mg/kg	50	46.3	93	80-120	
Silver	mg/kg	25	23.8	95	80-120	
Sodium	mg/kg	500	457J	91	80-120	
Zinc	mg/kg	50	48.7	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165914 2165915

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		92366269001 Result	Spike Conc.	Spike Conc.	MS Result					
Arsenic	mg/kg	10.4	39.7	38.6	40.0	44.9	74	89	75-125	12 M1
Barium	mg/kg	69.4	39.7	38.6	86.8	126	44	146	75-125	37 M1,R1

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Parameter	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165914		MSD		2165915		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					
Cadmium	mg/kg	0.19	39.7	38.6	32.9	32.7	82	84	75-125	1	
Calcium	mg/kg	3200	397	386	2640	4090	-140	230	75-125	43	M1,R1
Chromium	mg/kg	43.4	39.7	38.6	55.8	73.5	31	78	75-125	27	M1,R1
Cobalt	mg/kg	8.3	39.7	38.6	37.1	38.9	72	79	75-125	5	M1
Lead	mg/kg	14.3	39.7	38.6	40.1	43.3	65	75	75-125	8	M1
Magnesium	mg/kg	4290	397	386	2980	4510	-330	57	75-125	41	M1,R1
Manganese	mg/kg	231	39.7	38.6	193	292	-95	159	75-125	41	M1,R1
Selenium	mg/kg	3.7	39.7	38.6	33.1	33.0	74	76	75-125	0	M1
Silver	mg/kg	ND	19.9	19.4	16.8	16.5	83	84	75-125	2	
Sodium	mg/kg	ND	397	386	463	542	79	102	75-125	16	
Zinc	mg/kg	51.1	39.7	38.6	69.4	77.4	46	68	75-125	11	M1

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 391260 Analysis Method: EPA 6010
 QC Batch Method: EPA 3010A Analysis Description: 6010 MET TCLP
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

METHOD BLANK: 2170945 Matrix: Water
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.050	12/19/17 04:29	
Barium	mg/L	ND	0.25	12/19/17 04:29	
Cadmium	mg/L	ND	0.0050	12/19/17 04:29	
Chromium	mg/L	ND	0.050	12/19/17 04:29	
Lead	mg/L	ND	0.025	12/19/17 04:29	
Selenium	mg/L	ND	0.10	12/19/17 04:29	
Silver	mg/L	ND	0.025	12/19/17 04:29	

LABORATORY CONTROL SAMPLE: 2170946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	2.5	2.6	105	80-120	
Barium	mg/L	2.5	2.3	91	80-120	
Cadmium	mg/L	2.5	2.5	99	80-120	
Chromium	mg/L	2.5	2.5	100	80-120	
Lead	mg/L	2.5	2.3	92	80-120	
Selenium	mg/L	2.5	2.6	103	80-120	
Silver	mg/L	1.2	0.91	73	80-120 L2	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2170947 2170948

Parameter	92366220001		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec			
Arsenic	mg/L	ND	2.5	2.5	2.5	2.5	99	99	75-125	0	
Barium	mg/L	0.62	2.5	2.5	3.0	3.0	93	97	75-125	3	
Cadmium	mg/L	0.32	2.5	2.5	2.7	2.7	94	95	75-125	1	
Chromium	mg/L	0.16	2.5	2.5	2.6	2.6	96	96	75-125	0	
Lead	mg/L	0.060	2.5	2.5	2.4	2.4	92	92	75-125	0	
Selenium	mg/L	ND	2.5	2.5	2.5	2.5	100	100	75-125	0	
Silver	mg/L	ND	1.2	1.2	1.3	1.2	100	100	75-125	0	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 390341 Analysis Method: EPA 6010
 QC Batch Method: EPA 3010A Analysis Description: 6010 MET
 Associated Lab Samples: 92366220011

METHOD BLANK: 2165865 Matrix: Water
 Associated Lab Samples: 92366220011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	100	12/18/17 01:31	
Antimony	ug/L	ND	5.0	12/18/17 01:31	
Arsenic	ug/L	ND	10.0	12/18/17 01:31	
Barium	ug/L	ND	5.0	12/18/17 01:31	
Beryllium	ug/L	ND	1.0	12/18/17 01:31	
Boron	ug/L	ND	50.0	12/18/17 01:31	
Cadmium	ug/L	ND	1.0	12/18/17 01:31	
Calcium	ug/L	ND	100	12/18/17 01:31	
Chromium	ug/L	ND	5.0	12/18/17 01:31	
Cobalt	ug/L	ND	5.0	12/18/17 01:31	
Copper	ug/L	ND	5.0	12/18/17 01:31	
Iron	ug/L	ND	50.0	12/18/17 01:31	
Lead	ug/L	ND	5.0	12/18/17 01:31	
Magnesium	ug/L	ND	100	12/18/17 01:31	
Manganese	ug/L	ND	5.0	12/18/17 01:31	
Molybdenum	ug/L	ND	5.0	12/18/17 01:31	
Nickel	ug/L	ND	5.0	12/18/17 01:31	
Potassium	ug/L	ND	5000	12/18/17 01:31	
Selenium	ug/L	ND	10.0	12/18/17 01:31	
Silicon	ug/L	ND	100	12/18/17 01:31	
Silver	ug/L	ND	5.0	12/18/17 01:31	
Sodium	ug/L	ND	5000	12/18/17 01:31	
Strontium	ug/L	ND	5.0	12/18/17 01:31	
Thallium	ug/L	ND	10.0	12/18/17 01:31	
Tin	ug/L	ND	5.0	12/18/17 01:31	
Titanium	ug/L	ND	5.0	12/18/17 01:31	
Vanadium	ug/L	ND	5.0	12/18/17 01:31	
Zinc	ug/L	ND	10.0	12/18/17 01:31	

LABORATORY CONTROL SAMPLE: 2165866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4680	94	80-120	
Antimony	ug/L	500	480	96	80-120	
Arsenic	ug/L	500	458	92	80-120	
Barium	ug/L	500	478	96	80-120	
Beryllium	ug/L	500	462	92	80-120	
Boron	ug/L	500	498	100	80-120	
Cadmium	ug/L	500	482	96	80-120	
Calcium	ug/L	5000	4700	94	80-120	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

LABORATORY CONTROL SAMPLE: 2165866

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	466	93	80-120	
Cobalt	ug/L	500	461	92	80-120	
Copper	ug/L	500	487	97	80-120	
Iron	ug/L	5000	4650	93	80-120	
Lead	ug/L	500	460	92	80-120	
Magnesium	ug/L	5000	4730	95	80-120	
Manganese	ug/L	500	456	91	80-120	
Molybdenum	ug/L	500	475	95	80-120	
Nickel	ug/L	500	464	93	80-120	
Potassium	ug/L	5000	4720J	94	80-120	
Selenium	ug/L	500	494	99	80-120	
Silicon	ug/L	2500	2260	90	80-120	
Silver	ug/L	250	242	97	80-120	
Sodium	ug/L	5000	4770J	95	80-120	
Strontium	ug/L	500	462	92	80-120	
Thallium	ug/L	500	456	91	80-120	
Tin	ug/L	500	465	93	80-120	
Titanium	ug/L	500	462	92	80-120	
Vanadium	ug/L	500	466	93	80-120	
Zinc	ug/L	500	450	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165867 2165868

Parameter	Units	92366546001		MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.							
Aluminum	ug/L	ND	5000	5000	5430	4770	105	91	75-125	13		
Antimony	ug/L	ND	500	500	456	457	91	91	75-125	0		
Arsenic	ug/L	ND	500	500	464	482	87	90	75-125	4		
Barium	ug/L	ND	500	500	527	476	105	95	75-125	10		
Beryllium	ug/L	ND	500	500	512	458	102	92	75-125	11		
Boron	ug/L	ND	500	500	613	592	96	91	75-125	3		
Cadmium	ug/L	ND	500	500	462	468	92	93	75-125	1		
Calcium	ug/L	ND	5000	5000	5510	4900	106	94	75-125	12		
Chromium	ug/L	ND	500	500	476	451	94	89	75-125	5		
Cobalt	ug/L	ND	500	500	455	464	91	92	75-125	2		
Copper	ug/L	ND	500	500	504	500	101	100	75-125	1		
Iron	ug/L	ND	5000	5000	5230	4640	103	91	75-125	12		
Lead	ug/L	474000	500	500	464000	472000	-1880	-300	75-125	2	M6	
Magnesium	ug/L	ND	5000	5000	4860	4650	97	93	75-125	5		
Manganese	ug/L	ND	500	500	476	454	95	90	75-125	5		
Molybdenum	ug/L	ND	500	500	463	471	92	94	75-125	2		
Nickel	ug/L	ND	500	500	452	461	90	92	75-125	2		
Potassium	ug/L	ND	5000	5000	ND	ND	109	97	75-125			
Selenium	ug/L	ND	500	500	444	433	89	87	75-125	2		
Silicon	ug/L	ND	2500	2500	2930	2670	98	88	75-125	10		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Parameter	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2165867		MS		MSD		2165868		% Rec	% Rec	% Rec	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Silver	ug/L	ND	250	250	247	236	98	94	75-125		5		
Sodium	ug/L	ND	5000	5000	7430J	6720J	105	91	75-125				
Strontium	ug/L	ND	500	500	517	464	103	93	75-125		11		
Thallium	ug/L	ND	500	500	426	436	85	87	75-125		2		
Tin	ug/L	ND	500	500	449	455	90	91	75-125		1		
Titanium	ug/L	ND	500	500	470	456	94	91	75-125		3		
Vanadium	ug/L	ND	500	500	477	456	95	91	75-125		4		
Zinc	ug/L	ND	500	500	439	455	87	91	75-125		4		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
Pace Project No.: 92366220

QC Batch: 390415 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5030 Low
Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

METHOD BLANK: 2166131 Matrix: Solid
Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.3	12/12/17 11:01	
1,1,1-Trichloroethane	ug/kg	ND	5.3	12/12/17 11:01	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.3	12/12/17 11:01	
1,1,2-Trichloroethane	ug/kg	ND	5.3	12/12/17 11:01	
1,1-Dichloroethane	ug/kg	ND	5.3	12/12/17 11:01	
1,1-Dichloroethene	ug/kg	ND	5.3	12/12/17 11:01	
1,1-Dichloropropene	ug/kg	ND	5.3	12/12/17 11:01	
1,2,3-Trichlorobenzene	ug/kg	ND	5.3	12/12/17 11:01	
1,2,3-Trichloropropane	ug/kg	ND	5.3	12/12/17 11:01	
1,2,4-Trichlorobenzene	ug/kg	ND	5.3	12/12/17 11:01	
1,2,4-Trimethylbenzene	ug/kg	ND	5.3	12/12/17 11:01	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.3	12/12/17 11:01	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.3	12/12/17 11:01	
1,2-Dichlorobenzene	ug/kg	ND	5.3	12/12/17 11:01	
1,2-Dichloroethane	ug/kg	ND	5.3	12/12/17 11:01	
1,2-Dichloropropane	ug/kg	ND	5.3	12/12/17 11:01	
1,3,5-Trimethylbenzene	ug/kg	ND	5.3	12/12/17 11:01	
1,3-Dichlorobenzene	ug/kg	ND	5.3	12/12/17 11:01	
1,3-Dichloropropane	ug/kg	ND	5.3	12/12/17 11:01	
1,4-Dichlorobenzene	ug/kg	ND	5.3	12/12/17 11:01	
2,2-Dichloropropane	ug/kg	ND	5.3	12/12/17 11:01	
2-Butanone (MEK)	ug/kg	ND	106	12/12/17 11:01	
2-Chlorotoluene	ug/kg	ND	5.3	12/12/17 11:01	
2-Hexanone	ug/kg	ND	52.9	12/12/17 11:01	
4-Chlorotoluene	ug/kg	ND	5.3	12/12/17 11:01	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	52.9	12/12/17 11:01	
Acetone	ug/kg	ND	106	12/12/17 11:01	
Benzene	ug/kg	ND	5.3	12/12/17 11:01	
Bromobenzene	ug/kg	ND	5.3	12/12/17 11:01	
Bromochloromethane	ug/kg	ND	5.3	12/12/17 11:01	
Bromodichloromethane	ug/kg	ND	5.3	12/12/17 11:01	
Bromoform	ug/kg	ND	5.3	12/12/17 11:01	
Bromomethane	ug/kg	ND	10.6	12/12/17 11:01	
Carbon tetrachloride	ug/kg	ND	5.3	12/12/17 11:01	
Chlorobenzene	ug/kg	ND	5.3	12/12/17 11:01	
Chloroethane	ug/kg	ND	10.6	12/12/17 11:01	
Chloroform	ug/kg	ND	5.3	12/12/17 11:01	
Chloromethane	ug/kg	ND	10.6	12/12/17 11:01	
cis-1,2-Dichloroethene	ug/kg	ND	5.3	12/12/17 11:01	
cis-1,3-Dichloropropene	ug/kg	ND	5.3	12/12/17 11:01	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING

Pace Project No.: 92366220

METHOD BLANK: 2166131

Matrix: Solid

Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	5.3	12/12/17 11:01	
Dibromomethane	ug/kg	ND	5.3	12/12/17 11:01	
Dichlorodifluoromethane	ug/kg	ND	10.6	12/12/17 11:01	
Diisopropyl ether	ug/kg	ND	5.3	12/12/17 11:01	
Ethylbenzene	ug/kg	ND	5.3	12/12/17 11:01	
Hexachloro-1,3-butadiene	ug/kg	ND	5.3	12/12/17 11:01	
Isopropylbenzene (Cumene)	ug/kg	ND	5.3	12/12/17 11:01	
m&p-Xylene	ug/kg	ND	10.6	12/12/17 11:01	
Methyl-tert-butyl ether	ug/kg	ND	5.3	12/12/17 11:01	
Methylene Chloride	ug/kg	ND	21.1	12/12/17 11:01	
n-Butylbenzene	ug/kg	ND	5.3	12/12/17 11:01	
n-Propylbenzene	ug/kg	ND	5.3	12/12/17 11:01	
Naphthalene	ug/kg	ND	5.3	12/12/17 11:01	
o-Xylene	ug/kg	ND	5.3	12/12/17 11:01	
p-Isopropyltoluene	ug/kg	ND	5.3	12/12/17 11:01	
sec-Butylbenzene	ug/kg	ND	5.3	12/12/17 11:01	
Styrene	ug/kg	ND	5.3	12/12/17 11:01	
tert-Butylbenzene	ug/kg	ND	5.3	12/12/17 11:01	
Tetrachloroethene	ug/kg	ND	5.3	12/12/17 11:01	
Toluene	ug/kg	ND	5.3	12/12/17 11:01	
trans-1,2-Dichloroethene	ug/kg	ND	5.3	12/12/17 11:01	
trans-1,3-Dichloropropene	ug/kg	ND	5.3	12/12/17 11:01	
Trichloroethene	ug/kg	ND	5.3	12/12/17 11:01	
Trichlorofluoromethane	ug/kg	ND	5.3	12/12/17 11:01	
Vinyl acetate	ug/kg	ND	52.9	12/12/17 11:01	
Vinyl chloride	ug/kg	ND	10.6	12/12/17 11:01	
Xylene (Total)	ug/kg	ND	10.6	12/12/17 11:01	
1,2-Dichloroethane-d4 (S)	%	98	70-132	12/12/17 11:01	
4-Bromofluorobenzene (S)	%	103	70-130	12/12/17 11:01	
Toluene-d8 (S)	%	100	70-130	12/12/17 11:01	

LABORATORY CONTROL SAMPLE: 2166132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	61.6	59.6	97	74-137	
1,1,1-Trichloroethane	ug/kg	61.6	58.6	95	67-140	
1,1,2,2-Tetrachloroethane	ug/kg	61.6	53.0	86	72-141	
1,1,2-Trichloroethane	ug/kg	61.6	57.9	94	78-138	
1,1-Dichloroethane	ug/kg	61.6	58.3	95	69-134	
1,1-Dichloroethene	ug/kg	61.6	57.2	93	67-138	
1,1-Dichloropropene	ug/kg	61.6	57.6	93	69-139	
1,2,3-Trichlorobenzene	ug/kg	61.6	59.6	97	70-146	
1,2,3-Trichloropropane	ug/kg	61.6	58.2	94	69-144	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

LABORATORY CONTROL SAMPLE: 2166132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	61.6	59.7	97	68-148	
1,2,4-Trimethylbenzene	ug/kg	61.6	58.0	94	74-137	
1,2-Dibromo-3-chloropropane	ug/kg	61.6	58.2	94	65-140	
1,2-Dibromoethane (EDB)	ug/kg	61.6	59.7	97	77-135	
1,2-Dichlorobenzene	ug/kg	61.6	57.8	94	77-141	
1,2-Dichloroethane	ug/kg	61.6	56.8	92	65-137	
1,2-Dichloropropane	ug/kg	61.6	56.9	92	72-136	
1,3,5-Trimethylbenzene	ug/kg	61.6	58.2	94	76-133	
1,3-Dichlorobenzene	ug/kg	61.6	57.9	94	74-138	
1,3-Dichloropropane	ug/kg	61.6	59.9	97	71-139	
1,4-Dichlorobenzene	ug/kg	61.6	58.7	95	76-138	
2,2-Dichloropropane	ug/kg	61.6	60.9	99	68-137	
2-Butanone (MEK)	ug/kg	123	111J	90	58-147	
2-Chlorotoluene	ug/kg	61.6	58.9	96	73-139	
2-Hexanone	ug/kg	123	115	93	62-145	
4-Chlorotoluene	ug/kg	61.6	59.6	97	76-141	
4-Methyl-2-pentanone (MIBK)	ug/kg	123	112	91	64-149	
Acetone	ug/kg	123	117J	95	53-153	
Benzene	ug/kg	61.6	55.9	91	73-135	
Bromobenzene	ug/kg	61.6	58.1	94	75-133	
Bromochloromethane	ug/kg	61.6	59.4	96	73-134	
Bromodichloromethane	ug/kg	61.6	57.5	93	71-135	
Bromoform	ug/kg	61.6	58.5	95	66-141	
Bromomethane	ug/kg	61.6	68.7	111	53-160	
Carbon tetrachloride	ug/kg	61.6	57.9	94	60-145	
Chlorobenzene	ug/kg	61.6	58.1	94	78-130	
Chloroethane	ug/kg	61.6	78.5	128	64-149	
Chloroform	ug/kg	61.6	56.1	91	70-134	
Chloromethane	ug/kg	61.6	59.9	97	52-150	
cis-1,2-Dichloroethene	ug/kg	61.6	59.6	97	70-133	
cis-1,3-Dichloropropene	ug/kg	61.6	58.6	95	68-134	
Dibromochloromethane	ug/kg	61.6	61.0	99	71-138	
Dibromomethane	ug/kg	61.6	57.9	94	74-130	
Dichlorodifluoromethane	ug/kg	61.6	66.0	107	40-160	
Diisopropyl ether	ug/kg	61.6	56.7	92	69-141	
Ethylbenzene	ug/kg	61.6	59.2	96	75-133	
Hexachloro-1,3-butadiene	ug/kg	61.6	58.7	95	68-143	
Isopropylbenzene (Cumene)	ug/kg	61.6	58.2	95	76-143	
m&p-Xylene	ug/kg	123	116	94	75-136	
Methyl-tert-butyl ether	ug/kg	61.6	51.6	84	68-144	
Methylene Chloride	ug/kg	61.6	53.6	87	45-154	
n-Butylbenzene	ug/kg	61.6	58.5	95	72-137	
n-Propylbenzene	ug/kg	61.6	58.5	95	76-136	
Naphthalene	ug/kg	61.6	59.2	96	68-151	
o-Xylene	ug/kg	61.6	58.8	95	76-141	
p-Isopropyltoluene	ug/kg	61.6	56.7	92	76-140	
sec-Butylbenzene	ug/kg	61.6	59.2	96	79-139	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
Pace Project No.: 92366220

LABORATORY CONTROL SAMPLE: 2166132

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Styrene	ug/kg	61.6	58.0	94	79-137	
tert-Butylbenzene	ug/kg	61.6	52.7	86	74-143	
Tetrachloroethene	ug/kg	61.6	54.8	89	71-138	
Toluene	ug/kg	61.6	57.1	93	74-131	
trans-1,2-Dichloroethene	ug/kg	61.6	60.1	98	67-135	
trans-1,3-Dichloropropene	ug/kg	61.6	58.6	95	65-146	
Trichloroethene	ug/kg	61.6	62.4	101	67-135	
Trichlorofluoromethane	ug/kg	61.6	62.8	102	59-144	
Vinyl acetate	ug/kg	123	78.8	64	40-160	
Vinyl chloride	ug/kg	61.6	70.6	115	56-141	
Xylene (Total)	ug/kg	185	175	95	76-137	
1,2-Dichloroethane-d4 (S)	%			101	70-132	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 2166134

Parameter	Units	92366220004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	115	84.0	73	70-130	
1,1,1-Trichloroethane	ug/kg	ND	115	115	99	70-130	
1,1,1,2,2-Tetrachloroethane	ug/kg	ND	115	58.7	51	70-130	M1
1,1,2-Trichloroethane	ug/kg	ND	115	86.3	75	70-130	
1,1-Dichloroethane	ug/kg	ND	115	104	90	70-130	
1,1-Dichloroethene	ug/kg	ND	115	106	92	49-180	
1,1-Dichloropropene	ug/kg	ND	115	85.1	74	70-130	
1,2,3-Trichlorobenzene	ug/kg	ND	115	ND	9	70-130	M1
1,2,3-Trichloropropane	ug/kg	ND	115	71.1	62	70-130	M1
1,2,4-Trichlorobenzene	ug/kg	ND	115	ND	8	70-130	M1
1,2,4-Trimethylbenzene	ug/kg	ND	115	31.1	27	70-130	M1
1,2-Dibromo-3-chloropropane	ug/kg	ND	115	61.7	53	70-130	M1
1,2-Dibromoethane (EDB)	ug/kg	ND	115	65.1	56	70-130	M1
1,2-Dichlorobenzene	ug/kg	ND	115	19.6J	17	70-130	M1
1,2-Dichloroethane	ug/kg	ND	115	93.3	81	70-130	
1,2-Dichloropropane	ug/kg	ND	115	94.9	82	70-130	
1,3,5-Trimethylbenzene	ug/kg	ND	115	44.6	39	70-130	M1
1,3-Dichlorobenzene	ug/kg	ND	115	15.8J	14	70-130	M1
1,3-Dichloropropane	ug/kg	ND	115	84.3	73	70-130	
1,4-Dichlorobenzene	ug/kg	ND	115	13.5J	12	70-130	M1
2,2-Dichloropropane	ug/kg	ND	115	109	94	70-130	
2-Butanone (MEK)	ug/kg	ND	231	231J	100	70-130	
2-Chlorotoluene	ug/kg	ND	115	36.2	31	70-130	M1
2-Hexanone	ug/kg	ND	231	163J	71	70-130	
4-Chlorotoluene	ug/kg	ND	115	20.9J	18	70-130	M1
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	231	176J	76	70-130	
Acetone	ug/kg	ND	231	337J	146	70-130	M1

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING

Pace Project No.: 92366220

MATRIX SPIKE SAMPLE: 2166134		92366220004	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Benzene	ug/kg	ND	115	81.8	71	50-166	
Bromobenzene	ug/kg	ND	115	25.8J	22	70-130	M1
Bromochloromethane	ug/kg	ND	115	88.3	77	70-130	
Bromodichloromethane	ug/kg	ND	115	90.9	79	70-130	
Bromoform	ug/kg	ND	115	66.1	57	70-130	M1
Bromomethane	ug/kg	ND	115	107	93	70-130	
Carbon tetrachloride	ug/kg	ND	115	107	93	70-130	
Chlorobenzene	ug/kg	ND	115	32.3	28	43-169	M1
Chloroethane	ug/kg	ND	115	148	128	70-130	
Chloroform	ug/kg	ND	115	115	90	70-130	
Chloromethane	ug/kg	ND	115	110	95	70-130	
cis-1,2-Dichloroethene	ug/kg	ND	115	79.6	69	70-130	M1
cis-1,3-Dichloropropene	ug/kg	ND	115	57.3	50	70-130	M1
Dibromochloromethane	ug/kg	ND	115	76.2	66	70-130	M1
Dibromomethane	ug/kg	ND	115	76.9	67	70-130	M1
Dichlorodifluoromethane	ug/kg	ND	115	90.1	78	70-130	
Diisopropyl ether	ug/kg	ND	115	92.9	81	70-130	
Ethylbenzene	ug/kg	ND	115	57.8	50	70-130	M1
Hexachloro-1,3-butadiene	ug/kg	ND	115	31.2	27	70-130	M1
Isopropylbenzene (Cumene)	ug/kg	ND	115	68.6	59	70-130	M1
m&p-Xylene	ug/kg	ND	231	90.7	39	70-130	M1
Methyl-tert-butyl ether	ug/kg	ND	115	88.0	76	70-130	
Methylene Chloride	ug/kg	ND	115	144	125	70-130	
n-Butylbenzene	ug/kg	ND	115	32.1	28	70-130	M1
n-Propylbenzene	ug/kg	ND	115	47.8	41	70-130	M1
Naphthalene	ug/kg	ND	115	ND	5	70-130	M1
o-Xylene	ug/kg	ND	115	46.5	40	70-130	M1
p-Isopropyltoluene	ug/kg	ND	115	51.0	44	70-130	M1
sec-Butylbenzene	ug/kg	ND	115	60.0	52	70-130	M1
Styrene	ug/kg	ND	115	16.5J	14	70-130	M1
tert-Butylbenzene	ug/kg	ND	115	67.4	58	70-130	M1
Tetrachloroethene	ug/kg	ND	115	71.3	62	70-130	M1
Toluene	ug/kg	ND	115	54.9	48	52-163	M1
trans-1,2-Dichloroethene	ug/kg	ND	115	64.3	56	70-130	M1
trans-1,3-Dichloropropene	ug/kg	ND	115	42.0	36	70-130	M1
Trichloroethene	ug/kg	ND	115	89.2	77	49-167	
Trichlorofluoromethane	ug/kg	ND	115	127	110	70-130	
Vinyl acetate	ug/kg	ND	231	ND	16	70-130	M1
Vinyl chloride	ug/kg	ND	115	116	101	70-130	
1,2-Dichloroethane-d4 (S)	%				99	70-132	
4-Bromofluorobenzene (S)	%				105	70-130	
Toluene-d8 (S)	%				96	70-130	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

SAMPLE DUPLICATE: 2166133

Parameter	Units	92366220002 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND		
1,1-Dichloroethene	ug/kg	ND	ND		
1,1-Dichloropropene	ug/kg	ND	ND		
1,2,3-Trichlorobenzene	ug/kg	ND	ND		
1,2,3-Trichloropropane	ug/kg	ND	ND		
1,2,4-Trichlorobenzene	ug/kg	ND	ND		
1,2,4-Trimethylbenzene	ug/kg	ND	ND		
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		
1,2-Dichlorobenzene	ug/kg	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND		
1,3,5-Trimethylbenzene	ug/kg	ND	ND		
1,3-Dichlorobenzene	ug/kg	ND	ND		
1,3-Dichloropropane	ug/kg	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND		
2,2-Dichloropropane	ug/kg	ND	ND		
2-Butanone (MEK)	ug/kg	ND	ND		
2-Chlorotoluene	ug/kg	ND	ND		
2-Hexanone	ug/kg	ND	ND		
4-Chlorotoluene	ug/kg	ND	ND		
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		
Acetone	ug/kg	ND	ND		
Benzene	ug/kg	ND	ND		
Bromobenzene	ug/kg	ND	ND		
Bromochloromethane	ug/kg	ND	ND		
Bromodichloromethane	ug/kg	ND	ND		
Bromoform	ug/kg	ND	ND		
Bromomethane	ug/kg	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND		
Chlorobenzene	ug/kg	ND	ND		
Chloroethane	ug/kg	ND	ND		
Chloroform	ug/kg	ND	18.3J		
Chloromethane	ug/kg	ND	ND		
cis-1,2-Dichloroethene	ug/kg	ND	ND		
cis-1,3-Dichloropropene	ug/kg	ND	ND		
Dibromochloromethane	ug/kg	ND	ND		
Dibromomethane	ug/kg	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND		
Diisopropyl ether	ug/kg	ND	ND		
Ethylbenzene	ug/kg	ND	ND		
Hexachloro-1,3-butadiene	ug/kg	ND	ND		
Isopropylbenzene (Cumene)	ug/kg	ND	ND		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

SAMPLE DUPLICATE: 2166133

Parameter	Units	92366220002 Result	Dup Result	RPD	Qualifiers
m&p-Xylene	ug/kg	ND	ND		
Methyl-tert-butyl ether	ug/kg	ND	ND		
Methylene Chloride	ug/kg	ND	36.8J		
n-Butylbenzene	ug/kg	ND	ND		
n-Propylbenzene	ug/kg	ND	ND		
Naphthalene	ug/kg	ND	ND		
o-Xylene	ug/kg	ND	ND		
p-Isopropyltoluene	ug/kg	ND	ND		
sec-Butylbenzene	ug/kg	ND	ND		
Styrene	ug/kg	ND	ND		
tert-Butylbenzene	ug/kg	ND	ND		
Tetrachloroethene	ug/kg	ND	ND		
Toluene	ug/kg	ND	ND		
trans-1,2-Dichloroethene	ug/kg	ND	ND		
trans-1,3-Dichloropropene	ug/kg	ND	ND		
Trichloroethene	ug/kg	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND		
Vinyl acetate	ug/kg	ND	ND		
Vinyl chloride	ug/kg	ND	ND		
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	103	95		9
4-Bromofluorobenzene (S)	%	99	96		3
Toluene-d8 (S)	%	99	97		2

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 391223 Analysis Method: EPA 8081
 QC Batch Method: EPA 3510 Analysis Description: 8081 GCS TCLP Pesticides
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

METHOD BLANK: 2170787 Matrix: Water
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlordane (Technical)	ug/L	ND	3.0	12/18/17 13:05	
Endrin	ug/L	ND	0.50	12/18/17 13:05	
gamma-BHC (Lindane)	ug/L	ND	0.50	12/18/17 13:05	
Heptachlor	ug/L	ND	0.50	12/18/17 13:05	
Heptachlor epoxide	ug/L	ND	0.50	12/18/17 13:05	
Methoxychlor	ug/L	ND	1000	12/18/17 13:05	
Toxaphene	ug/L	ND	3.0	12/18/17 13:05	
Decachlorobiphenyl (S)	%	100	10-138	12/18/17 13:05	
Tetrachloro-m-xylene (S)	%	109	10-110	12/18/17 13:05	

LABORATORY CONTROL SAMPLE & LCSD: 2170788 2170789

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Endrin	ug/L	1.2	0.97	1.1	78	89	20-134	13	30	
gamma-BHC (Lindane)	ug/L	1.2	0.91	1.0	74	81	20-118	10	30	
Heptachlor	ug/L	1.2	0.85	0.94	69	76	20-142	10	30	
Heptachlor epoxide	ug/L	1.2	0.94	1.1	76	85	22-133	12	30	
Methoxychlor	ug/L	3.7	ND	ND	82	95	44-150		30	
Decachlorobiphenyl (S)	%				84	94	10-138			
Tetrachloro-m-xylene (S)	%				81	86	10-110			

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 414891 Analysis Method: EPA 8151
 QC Batch Method: EPA 3510 Analysis Description: 8151 GCS Herbicides TCLP
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

METHOD BLANK: 2255721 Matrix: Water
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-TP (Silvex)	mg/L	ND	0.00019	12/28/17 09:30	
2,4-D	mg/L	ND	0.00094	12/28/17 09:30	
2,4-DCAA (S)	%	59	39-139	12/28/17 09:30	

METHOD BLANK: 2257487 Matrix: Water
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-TP (Silvex)	mg/L	ND	0.00019	12/28/17 17:20	
2,4-D	mg/L	ND	0.00094	12/28/17 17:20	
2,4-DCAA (S)	%	79	39-139	12/28/17 17:20	

METHOD BLANK: 2259250 Matrix: Water
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-TP (Silvex)	mg/L	ND	0.00019	12/28/17 16:30	
2,4-D	mg/L	ND	0.00094	12/28/17 16:30	
2,4-DCAA (S)	%	94	39-139	12/28/17 16:30	

LABORATORY CONTROL SAMPLE: 2263594

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-TP (Silvex)	mg/L	.012	0.0093	77	53-134	
2,4-D	mg/L	.06	0.045	75	35-124	
2,4-DCAA (S)	%			74	39-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263719 2263720

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		92366389001 Result	Spike Conc.	Spike Conc.	MS Result					
2,4,5-TP (Silvex)	mg/L	ND	.012	.012	0.012	0.011	99	93	53-134	7

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Parameter	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2263719		MSD		MSD		MSD		% Rec Limits	RPD	Qual
	92366389001	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec				
2,4-D	mg/L	ND	.06	.06	0.057	0.054	96	90	35-124	6	
2,4-DCAA (S)	%						97	91	39-139		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 389953 Analysis Method: ASTM D2974-87
 QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

SAMPLE DUPLICATE: 2163648

Parameter	Units	92365780001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	9.8	9.7	1	

SAMPLE DUPLICATE: 2163649

Parameter	Units	92366220010 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	80.9	81.1	0	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 390196 Analysis Method: EPA 1010
 QC Batch Method: EPA 1010 Analysis Description: 1010 Flash Point, Closed Cup
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005

SAMPLE DUPLICATE: 2165012

Parameter	Units	92365703001 Result	Dup Result	RPD	Qualifiers
Flashpoint	deg F	>200	>200		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
Pace Project No.: 92366220

QC Batch:	390798	Analysis Method:	EPA 1010
QC Batch Method:	EPA 1010	Analysis Description:	1010 Flash Point, Closed Cup
Associated Lab Samples:	92366220006		

SAMPLE DUPLICATE: 2168372

Parameter	Units	30238230001 Result	Dup Result	RPD	Qualifiers
Flashpoint	deg F	> 200.0	> 200.0		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 390849 Analysis Method: EPA 1010
 QC Batch Method: EPA 1010 Analysis Description: 1010 Flash Point, Closed Cup
 Associated Lab Samples: 92366220007, 92366220008, 92366220009, 92366220010

SAMPLE DUPLICATE: 2168528

Parameter	Units	92366220007 Result	Dup Result	RPD	Qualifiers
Flashpoint	deg F	>200	>200		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 389995 Analysis Method: EPA 9045
 QC Batch Method: EPA 9045 Analysis Description: 9045 pH
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004

SAMPLE DUPLICATE: 2163769

Parameter	Units	92366220001 Result	Dup Result	RPD	Qualifiers
pH at 25 Degrees C	Std. Units	9.0	9.1	0	

SAMPLE DUPLICATE: 2163771

Parameter	Units	92365703001 Result	Dup Result	RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.6	7.6	0	

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
Pace Project No.: 92366220

QC Batch: 390197 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: 9045 pH
Associated Lab Samples: 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

SAMPLE DUPLICATE: 2165153

Parameter	Units	92366220005 Result	Dup Result	RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.6	8.8	2	H1

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 390143 Analysis Method: EPA 300.0
 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
 Associated Lab Samples: 92366220011

METHOD BLANK: 2164758 Matrix: Water
 Associated Lab Samples: 92366220011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	0.10	12/10/17 12:07	
Chloride	mg/L	ND	1.0	12/10/17 12:07	
Fluoride	mg/L	ND	0.10	12/10/17 12:07	
Sulfate	mg/L	ND	1.0	12/10/17 12:07	

LABORATORY CONTROL SAMPLE: 2164759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	2.5	2.4	94	90-110	
Chloride	mg/L	50	49.9	100	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	50	51.7	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2164760 2164761

Parameter	Units	92365915001		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Bromide	mg/L	5.3	2.5	2.5	6.6	6.6	53	53	90-110	0	M1	
Chloride	mg/L	756	50	50	724	794	-66	74	90-110	9	M6	
Fluoride	mg/L	6.6	2.5	2.5	8.3	8.3	69	65	90-110	1	M1	
Sulfate	mg/L	1630	50	50	1490	1700	-274	142	90-110	13	M6,R1	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2164762 2164763

Parameter	Units	92365838008		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Bromide	mg/L	0.51	2.5	2.5	3.0	3.1	102	102	90-110	1		
Chloride	mg/L	67.8	50	50	111	110	86	84	90-110	1	M1	
Fluoride	mg/L	0.26	2.5	2.5	2.8	2.8	100	101	90-110	1		
Sulfate	mg/L	163	50	50	209	206	91	86	90-110	1	M1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 390791 Analysis Method: EPA 353.2
 QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

METHOD BLANK: 2168356 Matrix: Solid
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/kg	ND	2.0	12/14/17 00:58	
Nitrogen, Nitrite	mg/kg	ND	1.0	12/14/17 00:58	

LABORATORY CONTROL SAMPLE: 2168357

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/kg	25	24.8	99	90-110	
Nitrogen, Nitrite	mg/kg	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2168358 2168359

Parameter	Units	92365955001		MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Nitrogen, Nitrate	mg/kg	2580	122	113	2900	2860	261	244	90-110	1 M6			
Nitrogen, Nitrite	mg/kg	ND	49	45.1	163	147	157	134	90-110	10 M1			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2168360 2168361

Parameter	Units	92366220003		MS	MSD	MS	MSD	MS	MSD	% Rec	Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Nitrogen, Nitrate	mg/kg	7080	106	111	7360	7660	267	526	90-110	4 M6			
Nitrogen, Nitrite	mg/kg	401	42.6	44.4	457	451	131	112	90-110	1 M6			

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 390058 Analysis Method: EPA 353.2
 QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
 Associated Lab Samples: 92366220011

METHOD BLANK: 2164171 Matrix: Water
 Associated Lab Samples: 92366220011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.020	12/08/17 13:52	

LABORATORY CONTROL SAMPLE: 2164172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	2.5	2.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2164173 2164174

Parameter	92366220011		MS	MSD	MS	MSD	MS	MSD	% Rec	MSD	% Rec	% Rec	MSD	% Rec	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual					
Nitrogen, Nitrate	mg/L	ND	2.5	2.5	2.5	2.5	101	101	90-110	0						

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 282053 Analysis Method: EPA 9014
 QC Batch Method: SW-846 7.3.3.2 Analysis Description: 733C Reactive Cyanide
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

METHOD BLANK: 1384635 Matrix: Solid
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	1.0	12/13/17 02:34	

LABORATORY CONTROL SAMPLE: 1384636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	99.8	ND	0	0-8	

SAMPLE DUPLICATE: 1384637

Parameter	Units	92366220010 Result	Dup Result	RPD	Qualifiers
Cyanide, Reactive	mg/kg	ND	ND		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 282051 Analysis Method: SM4500S2F-00
 QC Batch Method: SW-846 7.3.4.2 Analysis Description: 734S Reactive Sulfide
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

METHOD BLANK: 1384632 Matrix: Solid
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007,
 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Reactive	mg/kg	ND	10	12/13/17 01:54	

LABORATORY CONTROL SAMPLE: 1384633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Reactive	mg/kg	199	43.7	22	0-52	

SAMPLE DUPLICATE: 1384634

Parameter	Units	92366220010 Result	Dup Result	RPD	Qualifiers
Sulfide, Reactive	mg/kg	ND	ND		

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QUALITY CONTROL DATA

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

QC Batch: 391225 Analysis Method: EPA 9056A
 QC Batch Method: EPA 9056A Analysis Description: 9056 IC Anions
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

METHOD BLANK: 2170806 Matrix: Solid
 Associated Lab Samples: 92366220001, 92366220002, 92366220003, 92366220004, 92366220005, 92366220006, 92366220007, 92366220008, 92366220009, 92366220010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	50.0	12/17/17 17:07	
Sulfate	mg/kg	ND	50.0	12/17/17 17:07	

LABORATORY CONTROL SAMPLE: 2170807

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	1250	1320	105	90-110	
Sulfate	mg/kg	1250	1310	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2170808 2170809

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.					
Chloride	mg/kg	567	6130	6130	6930	104	109	90-110	5	
Sulfate	mg/kg	ND	6130	6130	6410	101	108	90-110	6	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2170810 2170811

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.					
Chloride	mg/kg	768	5790	5790	6880	106	106	90-110	1	
Sulfate	mg/kg	ND	5790	5790	6200	105	104	90-110	1	

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QUALIFIERS

Project: LAGOON SAMPLING

Pace Project No.: 92366220

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte
PASI-O	Pace Analytical Services - Ormond Beach
PASI-PA	Pace Analytical Services - Greensburg

ANALYTE QUALIFIERS

1g	The sample was weighed and preserved in the laboratory from a soil jar. Sample was not preserved within 48 hours.
H1	Analysis conducted outside the EPA method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92366220001	G-5-U	EPA 3510	391223	EPA 8081	391356
92366220002	G-5-L	EPA 3510	391223	EPA 8081	391356
92366220003	G-8-U	EPA 3510	391223	EPA 8081	391356
92366220004	G-8-L	EPA 3510	391223	EPA 8081	391356
92366220005	G-7-U	EPA 3510	391223	EPA 8081	391356
92366220006	G-7-L	EPA 3510	391223	EPA 8081	391356
92366220007	G-4-U	EPA 3510	391223	EPA 8081	391356
92366220008	G-4-L	EPA 3510	391223	EPA 8081	391356
92366220009	G-1-U	EPA 3510	391223	EPA 8081	391356
92366220010	G-1-L	EPA 3510	391223	EPA 8081	391356
92366220001	G-5-U	EPA 3510	414891	EPA 8151	415326
92366220002	G-5-L	EPA 3510	414891	EPA 8151	415326
92366220003	G-8-U	EPA 3510	414891	EPA 8151	415326
92366220004	G-8-L	EPA 3510	414891	EPA 8151	415326
92366220005	G-7-U	EPA 3510	414891	EPA 8151	415326
92366220006	G-7-L	EPA 3510	414891	EPA 8151	415326
92366220007	G-4-U	EPA 3510	414891	EPA 8151	415326
92366220008	G-4-L	EPA 3510	414891	EPA 8151	415326
92366220009	G-1-U	EPA 3510	414891	EPA 8151	415326
92366220010	G-1-L	EPA 3510	414891	EPA 8151	415326
92366220001	G-5-U	EPA 3050	390357	EPA 6010	390520
92366220002	G-5-L	EPA 3050	390357	EPA 6010	390520
92366220003	G-8-U	EPA 3050	390357	EPA 6010	390520
92366220004	G-8-L	EPA 3050	390357	EPA 6010	390520
92366220005	G-7-U	EPA 3050	390357	EPA 6010	390520
92366220006	G-7-L	EPA 3050	390357	EPA 6010	390520
92366220007	G-4-U	EPA 3050	390357	EPA 6010	390520
92366220008	G-4-L	EPA 3050	390357	EPA 6010	390520
92366220009	G-1-U	EPA 3050	390357	EPA 6010	390520
92366220010	G-1-L	EPA 3050	390357	EPA 6010	390520
92366220001	G-5-U	EPA 3010A	391260	EPA 6010	391276
92366220002	G-5-L	EPA 3010A	391260	EPA 6010	391276
92366220003	G-8-U	EPA 3010A	391260	EPA 6010	391276
92366220004	G-8-L	EPA 3010A	391260	EPA 6010	391276
92366220005	G-7-U	EPA 3010A	391260	EPA 6010	391276
92366220006	G-7-L	EPA 3010A	391260	EPA 6010	391276
92366220007	G-4-U	EPA 3010A	391260	EPA 6010	391276
92366220008	G-4-L	EPA 3010A	391260	EPA 6010	391276
92366220009	G-1-U	EPA 3010A	391260	EPA 6010	391276
92366220010	G-1-L	EPA 3010A	391260	EPA 6010	391276
92366220011	SLUDGE EQUIPMENT BLANK	EPA 3010A	390341	EPA 6010	390499
92366220001	G-5-U	EPA 7470	391263	EPA 7470	391298
92366220002	G-5-L	EPA 7470	391263	EPA 7470	391298
92366220003	G-8-U	EPA 7470	391263	EPA 7470	391298
92366220004	G-8-L	EPA 7470	391263	EPA 7470	391298
92366220005	G-7-U	EPA 7470	391263	EPA 7470	391298

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92366220006	G-7-L	EPA 7470	391263	EPA 7470	391298
92366220007	G-4-U	EPA 7470	391263	EPA 7470	391298
92366220008	G-4-L	EPA 7470	391263	EPA 7470	391298
92366220009	G-1-U	EPA 7470	391263	EPA 7470	391298
92366220010	G-1-L	EPA 7470	391263	EPA 7470	391298
92366220011	SLUDGE EQUIPMENT BLANK	EPA 7470	390311	EPA 7470	390429
92366220001	G-5-U	EPA 7471	390711	EPA 7471	390819
92366220002	G-5-L	EPA 7471	390711	EPA 7471	390819
92366220003	G-8-U	EPA 7471	390711	EPA 7471	390819
92366220004	G-8-L	EPA 7471	390711	EPA 7471	390819
92366220005	G-7-U	EPA 7471	390711	EPA 7471	390819
92366220006	G-7-L	EPA 7471	390711	EPA 7471	390819
92366220007	G-4-U	EPA 7471	390711	EPA 7471	390819
92366220008	G-4-L	EPA 7471	390711	EPA 7471	390819
92366220009	G-1-U	EPA 7471	390711	EPA 7471	390819
92366220010	G-1-L	EPA 7471	390711	EPA 7471	390819
92366220001	G-5-U	EPA 8260	390415		
92366220002	G-5-L	EPA 8260	390415		
92366220003	G-8-U	EPA 8260	390415		
92366220004	G-8-L	EPA 8260	390415		
92366220005	G-7-U	EPA 8260	390415		
92366220006	G-7-L	EPA 8260	390415		
92366220007	G-4-U	EPA 8260	390415		
92366220008	G-4-L	EPA 8260	390415		
92366220009	G-1-U	EPA 8260	390415		
92366220010	G-1-L	EPA 8260	390415		
92366220001	G-5-U	ASTM D2974-87	389953		
92366220002	G-5-L	ASTM D2974-87	389953		
92366220003	G-8-U	ASTM D2974-87	389953		
92366220004	G-8-L	ASTM D2974-87	389953		
92366220005	G-7-U	ASTM D2974-87	389953		
92366220006	G-7-L	ASTM D2974-87	389953		
92366220007	G-4-U	ASTM D2974-87	389953		
92366220008	G-4-L	ASTM D2974-87	389953		
92366220009	G-1-U	ASTM D2974-87	389953		
92366220010	G-1-L	ASTM D2974-87	389953		
92366220001	G-5-U	EPA 1010	390196		
92366220002	G-5-L	EPA 1010	390196		
92366220003	G-8-U	EPA 1010	390196		
92366220004	G-8-L	EPA 1010	390196		
92366220005	G-7-U	EPA 1010	390196		
92366220006	G-7-L	EPA 1010	390798		
92366220007	G-4-U	EPA 1010	390849		
92366220008	G-4-L	EPA 1010	390849		
92366220009	G-1-U	EPA 1010	390849		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LAGOON SAMPLING
 Pace Project No.: 92366220

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92366220010	G-1-L	EPA 1010	390849		
92366220001	G-5-U	EPA 9045	389995		
92366220002	G-5-L	EPA 9045	389995		
92366220003	G-8-U	EPA 9045	389995		
92366220004	G-8-L	EPA 9045	389995		
92366220005	G-7-U	EPA 9045	390197		
92366220006	G-7-L	EPA 9045	390197		
92366220007	G-4-U	EPA 9045	390197		
92366220008	G-4-L	EPA 9045	390197		
92366220009	G-1-U	EPA 9045	390197		
92366220010	G-1-L	EPA 9045	390197		
92366220011	SLUDGE EQUIPMENT BLANK	EPA 300.0	390143		
92366220001	G-5-U	EPA 353.2	390791		
92366220002	G-5-L	EPA 353.2	390791		
92366220003	G-8-U	EPA 353.2	390791		
92366220004	G-8-L	EPA 353.2	390791		
92366220005	G-7-U	EPA 353.2	390791		
92366220006	G-7-L	EPA 353.2	390791		
92366220007	G-4-U	EPA 353.2	390791		
92366220008	G-4-L	EPA 353.2	390791		
92366220009	G-1-U	EPA 353.2	390791		
92366220010	G-1-L	EPA 353.2	390791		
92366220011	SLUDGE EQUIPMENT BLANK	EPA 353.2	390058		
92366220001	G-5-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220002	G-5-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220003	G-8-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220004	G-8-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220005	G-7-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220006	G-7-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220007	G-4-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220008	G-4-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220009	G-1-U	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220010	G-1-L	SW-846 7.3.3.2	282053	EPA 9014	282153
92366220001	G-5-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220002	G-5-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220003	G-8-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220004	G-8-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220005	G-7-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220006	G-7-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220007	G-4-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220008	G-4-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220009	G-1-U	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220010	G-1-L	SW-846 7.3.4.2	282051	SM4500S2F-00	282152
92366220001	G-5-U	EPA 9056A	391225		
92366220002	G-5-L	EPA 9056A	391225		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LAGOON SAMPLING
Pace Project No.: 92366220

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92366220003	G-8-U	EPA 9056A	391225		
92366220004	G-8-L	EPA 9056A	391225		
92366220005	G-7-U	EPA 9056A	391225		
92366220006	G-7-L	EPA 9056A	391225		
92366220007	G-4-U	EPA 9056A	391225		
92366220008	G-4-L	EPA 9056A	391225		
92366220009	G-1-U	EPA 9056A	391225		
92366220010	G-1-L	EPA 9056A	391225		

REPORT OF LABORATORY ANALYSIS

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	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: August 4, 2017 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.04	Issuing Authority: Pace Quality Office

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville

Sample Condition Upon Receipt

Client Name: Chemical

Project #:

WO# : 92366220



Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No

Date/Initials Person Examining Contents: 12/14/11

Packing Material: Bubble Wrap Bubble Bags None Other Biological Tissue Frozen? Yes No N/A

Thermometer: IR Gun ID: T1784 Type of Ice: Wet Blue None

Correction Factor: Cooler Temp Corrected (°C): 5.8, 6.0

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)?
 Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

	Comments/Discrepancy:
Chain of Custody Present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>SFWZ</u>	
Headspace in VOA Vials (>5-6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____ Date/Time: _____

Comments/Sample Discrepancy: _____

Lot ID of split containers: _____

Project Manager SCURF Review: (Signature)

Date: 12/8

Project Manager SRF Review: (Signature)

Date: 12/8

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers)



Document Name:
Sample Condition Upon Receipt(SCUR)
 Document No.:
F-CAR-CS-033-Rev.04

Document Revised: August 4, 2017
 Page 2 of 2
 Issuing Authority:
 Pace Quality Office
WO# : 92366220

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**
****Bottom half of box is to list number of bottles**

Project #

PM: PTE Due Date: 12/21/17
 CLIENT: 92-Chem Spec

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	Cubitainer	VSGU-20 mL Scintillation vials (N/A)	GN
1	/	/	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
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10	/	/	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

VENATOR

February 28, 2024

Ms. Shelley DeHart, AICP
Assistant Planning Director
Town of Harrisburg
4100 Main Street Suite 102
Harrisburg, NC 28075

Subject: Response to Request for More Information for Special Use Application for Venator in Letter Dated February 12, 2024

Dear Ms. DeHart:

Thank you for your letter dated February 12, 2024, requesting more information on Venator Special Use Permit Application. Please find below answers to each of the comments contained your letter. Town of Harrisburg comments are in bold.

- 1. Please provide a report on the contents of sediment from the pond that is proposed to be placed within the landfill. The report shall identify all constituent elements.**
 - a. In addition, provide the TCLP test results.**

Please see the attached Sediment Sampling Summary document, labeled "Sediment Sampling Summary Letter – DRC.pdf". This Sediment Sampling Summary Letter reports all constituent elements of the sediment from the existing Lagoon 5 that are proposed to be placed within the onsite landfill as part of the mitigation of the existing Lagoon 5 and remediation of the property. The Sediment Sampling Summary Letter also provides the TLCP test results, as requested.

- 2. Your team has reported that although the sediment is nonhazardous, the local landfills will not accept the sediment for disposal due to its viscosity.**

There may have been some miscommunication on this issue. The Republic Services Charlotte Motor Speedway (CMS) Landfill is required by regulatory bodies to cover waste at the end of each operational day with a minimum of 6-inch soil cover or "approved alternate soil-like material". Venator/ERM performed a Pilot Demonstration Project with Republic's CMS Landfill in 2019 to use the Lagoon 5 sediments as "Alternate Daily Cover" for Republic's waste operations, which demonstration project with Republic was approved by NCDEQ. Despite NCDEQ approval, Republic chose not to use Venator sediments as an "alternate daily cover" material because the material was slippery, and they were concerned about operating heavy equipment on slick surfaces. To be clear, Republic did not decide against using the Lagoon 5 sediments as "Alternate Daily Cover" due to viscosity, nor has any other local landfill refused the Lagoon 5 sediments due to viscosity.

VENATOR

The physical characteristic of concern is the physical state more specifically, the hazards presented by operating heavy equipment on slippery or slick material.

- a. **Provide information on options to treat the sediment (e.g., drying, conditioning, stabilization) resulting in suitability for local landfill acceptance.**

As stated in our response to item 2, above, despite NCDEQ approval, Republic decided against accepting the Lagoon 5 sediments as an "Alternate Daily Cover" at the Republic Services/Charlotte Motor Speedway Landfill, which was Venator's initial plan for sediment disposal. So, development of the onsite industrial landfill is Venator's alternative plan that is subject to NCDEQ approval, commits to providing remediation for Lagoon 5, commits to minimizing environmental impacts to the property, and avoids placing a large amount of trucks on public roads because transfer of the Lagoon 5 sediments offsite to any other landfill would require approximately 3,500 truck trips (remove up to 35,000 cubic yards (CY) of sediments at an average of 10 CY per truck).

- b. **Will there be any onsite treatment of the sediment prior to placement within the landfill?**

Please reference the attached "Site Development Plan -DRC.pdf", with specific attention to Sheet 10 entitled "SMWU—5 Reconfiguration Plan." The reconfigured Lagoon 5, which is shrinking in footprint size as a benefit of the lagoon 5 reconfiguration resulting from the construction of the proposed landfill, will contain a forebay to receive facility wastewater and allow sediments to settle and accumulate within the forebay area for removal approximately every 5-years. For each cleanout event of the forebay (5-years approx.), wastewater will be temporarily routed to the main portion of Lagoon 5 to allow dewatering and drying of the sediments in the forebay for removal and disposal in the onsite industrial landfill. Therefore, the landfill will be active approximately once every 5-years for cleanout of the Lagoon 5 forebay area following initial cleanout of the existing Lagoon 5.

- c. **It is the Town's understanding that any landfill deposit would require the waste to pass a "paint filter test." Please explain how this would be achieved and whether Venator has submitted material after passing this test to the existing local landfill for review.**

Please refer to previous comment 2 reply, above. The waste was transferred to the CMS landfill under approval of a Pilot Demonstration Project (NCDEQ) and the sediments passed "paint filter test" requirements with natural drying. Based on the results of the Pilot Demonstration Project, it was shown that the sediments in question were able to dry naturally for transportation and pass a paint filter test.

3. **The proposed landfill area is 3.6 acres in size and based on information provided, it will be used over time.**

VENATOR

a. What size landfill would be needed to accommodate the remediation of pond #5?

Please reference the attached "Site Development Plan -DRC.pdf", with specific attention to Sheet 22 entitled "Facility Plan—Phase 1", which shows the development of Phase 1 and is intended to accommodate the initial cleanout of Lagoon 5 (approx. 30,000 to 35,000 CY). Phase 1 development is approximately 2.6 acres.

b. Additionally, how long would the remediated pond #5 provide service before sediment needs to be properly disposed of again?

Based on historical sedimentation accumulation rates, we anticipate the reconfigured Lagoon 5 forebay to require cleanout once every 5-years. The landfill would be inactive between these cleanout events with deposited waste covered with soil and seeded for stabilization between cleanout events.

c. Provide a phasing plan for the proposed landfill.

Please reference the attached "Site Development Plan -DRC.pdf", with specific attention to Sheets 24-28 entitled "Facility Plan—Phase 1, Phase 2, Phase 3, Phase 4, and Phase 5", which sheets illustrate proposed phasing of onsite landfill development.

4. There are two temporary tanks proposed to be used during pond reconstruction. Please provide additional information on tank structures including safety features to prevent and/or address leaks and/or spills.

Please reference the attached files entitled, "DV100-2-DRC.pdf," "Tank-DRC.pdf," "LakeTankTM.B16-DRC," and "Pump flex 2020 - DRC" to address tank structures including safety features to prevent and/or address leaks and/or spills.

Temporary Tank Overview & Safety Features

Two temporary tanks will serve as the settling and holding area for liquids during the lagoon #5 refurbishment process in order to dry and remediate the existing sediment layer. The temporary tanks will provide 1.25 million gallons of storage with approximately 627K gallons of storage each. The tanks are approximately 100' in diameter and 12' high. The piping system will allow for the isolation of a single tank while the other continues to operate should the need arise (i.e. a quality or maintenance issue). The tanks will take approximately 6-8 weeks to install and will only be in service for 6-8 months during the lagoon 5 reconfiguration. All disturbed areas will be seeded for stabilization with vegetation after installation and again after tank removal.

The tank design and proposed operations provide a variety of engineering and administrative controls for environmental and personnel safety.

- Tank sizing and design allows for reserve capacity in cases of average and max flow.
- Tanks will be installed by certified contractor according to their written procedures and specifications in "Lake Tank Installation Manual".

VENATOR

- Tank material of construction is compatible with wastewater being managed.
- The tanks will be located within an earthen berm that will provide 200,000 gallons of secondary containment.
- Tank footprint falls within NCDEQ approved Sediment and Erosion Control Plan to minimize any stormwater issues.
- Two tanks for redundancy in case of emergency or stormwater surge.
- Tank level can be verified visually. Tanks will be equipped with level indication that alarms at a local NEMA 4 control panel. Upon high level, the controller will automatically dial multiple operators (cell phones) in the event of high level so that corrective actions can be initiated.
- The facility has a lined lagoon which is a permitted component of the NPDES treatment system which could be used for water storage in the event of an emergency. The lined lagoon has a capacity of 350,000 gallons.
- The temporary tanks will be operated by licensed NC Water Pollution Control System Operators for Physical Chemical (PC)2 and their respective PC1 back up. These are Operators of Response Charge as required by the Site's NPDES operating permit.
- The facility has developed written operating procedures for the use of the temporary tanks that include the following controls:
 - Use of checklists for valve configurations.
 - A daily inspection of the temporary tank system.
 - The maintenance of tank levels at half volume so that any surges, upsets or emergencies can be managed.
 - Freeze protection plans.
- Site maintains a comprehensive Contingency and Emergency Response Plan and can utilize off site contractors in the event of an emergency that cannot be managed by Site personnel.

Technical Specifications for the Equipment

Tank site will be prepared with 3500 cubic yards of soil from the borrow area to ensure a stable base for the tanks.

- Tank consists of steel panels that are 12 ft high x 26.7 ft long and weighing 6549 lbs. Also, the design includes heavy duty connecting plates and pins for reliable containment and 2 OSHA compliant access/egress ladders.
- Dual liner system to include a geo textile ground pad and a 40 mil LLDPE liner
- Tanks will be provided with level indication with auto dialer alarms to alert operation via phone.
- Chemical transfer hoses used for inlet and outlet temporary tank piping are durable multi-layer chemical hose construction that are compatible with material being transferred. Most of the hose connections will be within the earthen berm for secondary containment.
- 4 X 4 self-priming 700 gpm diesel driven centrifugal pump.

5. **If approved, your projected timeline to completion is one year. What financial security would be in-place to ensure completion? Who would be holding the surety?**

VENATOR

Phase 1 of the landfill is anticipated to be completed within 1-year. In accordance with NCDEQ – Solid Waste Management regulations, Venator will supply and continuously update (annually) Financial Assurance for Closure and Post-Closure care of the landfill. The State of North Carolina will be the benefactor of the financial assurance mechanism in place. Refer to NCDEQ regulation 15A NCAC 13B .0504(f) for additional detail/information. Financial assurance remains in place following construction of the initial landfill construction and up to 30 years following operations of the landfill (closure).

6. **Any special use permit approval granted by the Board of Adjustment shall be made subject to Venator obtaining all required permits from NCDEQ, with copies submitted to the Town prior to release for construction.**

Venator understands and agrees.

7. **It is the Town's understanding that Venator will not be accepting any waste transferred to the proposed landfill. Any approval granted by the Board of adjustment shall be made subject to the prohibition of any off-site waste for disposal in the proposed landfill.**

Yes that is correct. No material from off -site.

8. **Site plan comments:**

- a. **Tree Protection survey**
 - i. **Please follow requirements found within Section 141.04.04 of the UDO.**
 1. **The heritage tree survey identifies seventeen trees (30-inches in diameter or greater). Please provide the diameter, species, and health of each tree.**

Venator has conducted a heritage tree survey. Please reference the attached "Updates To Tree Replacements Exhibit 11-01-23 (1).pdf", specifically relevant portion of which is clipped and pasted below:

VENATOR

ID #	DIAMETER	Condition	Common Name	X Coordinate	Y Coordinate
1	47	Good	Willow oak	1516027.572	579581.1783
2	30.5	Good	Willow oak	1516179.104	579659.353
3	37	Good	Sycamore	1516296.961	579726.6577
4	32	Good	Willow oak	1516365.058	579857.3844
5	36	Good	Willow oak	1516485.334	579919.8253
6	32	Good	null	1516469.07	579944.2373
7	31	Good	Willow oak	1516458.337	579773.4551
8	31.5	Good	Willow oak	1516601.523	579914.1432
9	32	Good	Willow oak	1516492.768	580039.6095
10	38	Good	Red oak	1516711.312	580062.9802
11	40.5	Good	Red oak	1516775.771	580096.9404
12	34	Good	Willow oak	1516764.339	580170.7608
13	33	Good	Water oak	1516633.581	580246.5602
14	33	Good	Shortleaf pine	1516957.987	580063.5609
				Latitude	Longitude
15	41	Poor	Green Ash	35.3315026	-80.6208499
16	32	Good	Water oak	35.3324013	-80.6204438
17	33	Good	Water oak	35.3323179	-80.6202014

ii. A mitigation plan is required for heritage trees to be removed for development. Please refer to UDO.

Venator has developed a mitigation plan. Please reference the attached "Updates To Tree Replacements Exhibit 11-01-23 (1).pdf".

b. Proposed Buffers: Please provide details of any proposed buffers.

The proposed plan complies with all NCDEQ solid waste buffers, which there is a 200 FEET Property Buffer & 500 FEET Buffer from the nearest resident. - Please reference the attached "Site Development Plan -DRC.pdf", with specific attention to Sheet 4 entitled "Site Development Plan", which addresses the details of proposed buffers.

Hopefully, the provided information addresses the Town's questions. Venator has been studying the lagoon for many years and has spent much time, effort, and money to develop the proposed option of developing an on-site industrial landfill and reconfiguring lagoon 5. These issues were studied by outside third-party engineering and consulting firms. Impacts to neighbors, the environment, plant operations and sustainability for the community and business were all considered factors. The proposed option is the option that provides a secure location for sediments in the existing lagoon, protects human health and the environment and is sustainable for the community and the business. It also has the support of the regulatory stakeholders.

VENATOR

If you need additional information please contact Michael Thomas at 704-455-4139 or Michael_thomas@venatorcorp.com or Jonna Stein at 70-455-4171 or jonna_stein@venatorcorp.com.

Sincerely,

Kevin Robinson
Venator - Site Manager

VENATOR

April 4, 2024

Ms. Shelley DeHart, AICP
Assistant Planning Director
Town of Harrisburg
4100 Main Street Suite 102
Harrisburg, NC 28075

Subject: Response to Request for More Information for Special Use Application for Venator Chemicals in Letter Dated February 12, 2024 Regarding Heritage Tree Survey

Dear Ms. DeHart:

In our response to the Town's February 12, 2024 letter requestion more information, specifically question number 8 related to the Heritage Tree Survey, I believe we inadvertently left off Exhibit 11-01-23 (1).pdf. Please find attached the original response to question 8 and a copy of the Exhibit 11-01-23 (1).pdf.

8. Site plan comments:

a. Tree Protection survey

i. Please follow requirements found within Section 141.04.04 of the UDO.

1. The heritage tree survey identifies seventeen trees (30-inches in diameter or greater). Please provide the diameter, species, and health of each tree.

Venator has conducted a heritage tree survey. Please reference the attached "Updates To Tree Replacements Exhibit 11-01-23 (1).pdf", specifically relevant portion of which is clipped and pasted below:

VENATOR

ID #	DIAMETER	Condition	Common Name	X Coordinate	Y Coordinate
1	47	Good	Willow oak	1516027.572	579581.1783
2	30.5	Good	Willow oak	1516179.104	579659.353
3	37	Good	Sycamore	1516296.961	579726.6577
4	32	Good	Willow oak	1516365.058	579857.3844
5	36	Good	Willow oak	1516485.334	579919.8253
6	32	Good	null	1516469.07	579944.2373
7	31	Good	Willow oak	1516458.337	579773.4551
8	31.5	Good	Willow oak	1516601.523	579914.1432
9	32	Good	Willow oak	1516492.768	580039.6095
10	38	Good	Red oak	1516711.312	580062.9802
11	40.5	Good	Red oak	1516775.771	580096.9404
12	34	Good	Willow oak	1516764.339	580170.7608
13	33	Good	Water oak	1516633.581	580246.5602
14	33	Good	Shortleaf pine	1516957.987	580063.5609
				Latitude	Longitude
15	41	Poor	Green Ash	35.3315026	-80.6208499
16	32	Good	Water oak	35.3324013	-80.6204438
17	33	Good	Water oak	35.3323179	-80.6202014

ii. A mitigation plan is required for heritage trees to be removed for development. Please refer to UDO.

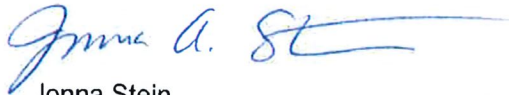
Venator has developed a mitigation plan. Please reference the attached "Updates To Tree Replacements Exhibit 11-01-23 (1).pdf".

b. Proposed Buffers: Please provide details of any proposed buffers.

The proposed plan complies with all NCDEQ solid waste buffers. Please reference the attached "Site Development Plan -DRC.pdf", with specific attention to Sheet 4 entitled "Site Development Plan", which addresses the details of proposed buffers.

I apologize for the omission and If you need additional information please contact me at 704-455-4171 or jonna_stein@venatorcorp.com.

Sincerely,

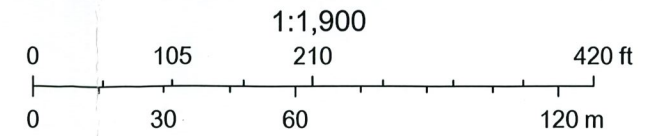


Jonna Stein
Environmental Health and Safety Manager

Venator Heritage Trees



10/30/2023, 9:46:58 AM

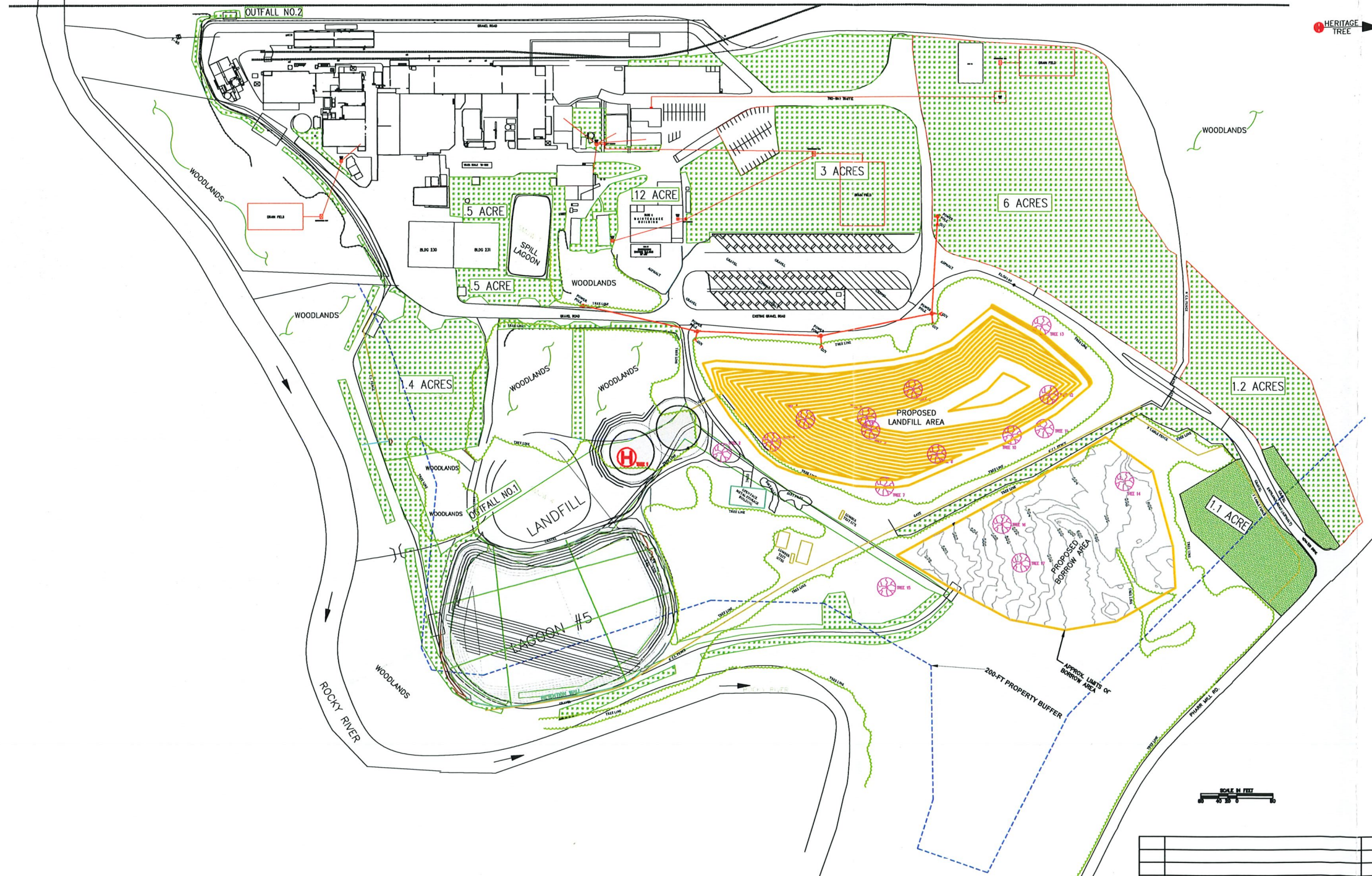


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Bill Leake



NC HWY 49



TREE ID#	DIAMETER	CONDITION	COMMON NAME	X COORDINATE	Y COORDINATE
1	47"	GOOD	WILLOW OAK	1516027.572	579581.1783
2	30.5"	GOOD	WILLOW OAK	1516179.104	579659.353
3	37"	GOOD	SYCAMORE	1516296.961	579726.6577
4	32"	GOOD	WILLOW OAK	1516365.058	579857.3844
5	36"	GOOD	WILLOW OAK	1516485.334	579919.8253
6	32"	GOOD	NULL	1516469.07	579944.2373
7	31"	GOOD	WILLOW OAK	1516458.337	579773.4551
8	31.5"	GOOD	WILLOW OAK	1516601.523	579914.1432
9	32"	GOOD	WILLOW OAK	1516492.768	580039.6095
10	38"	GOOD	RED OAK	1516711.312	580062.9802
11	40.5"	GOOD	RED OAK	1516775.771	580096.9404
12	34"	GOOD	WILLOW OAK	1516764.339	580170.7608
13	33"	GOOD	WILLOW OAK	1516633.581	580246.5602
14	33"	GOOD	SHORTLEAF PINE	1516957.987	580063.5609

TREE ID#	DIAMETER	CONDITION	COMMON NAME	LATITUDE	LONGITUDE
15	41"	POOR	GREEN ASH	35.3315026	-80.6208499
16	32"	GOOD	WATER OAK	35.3324013	-80.6204438
17	33"	GOOD	WATER OAK	35.3323179	-80.6202014

LEGEND

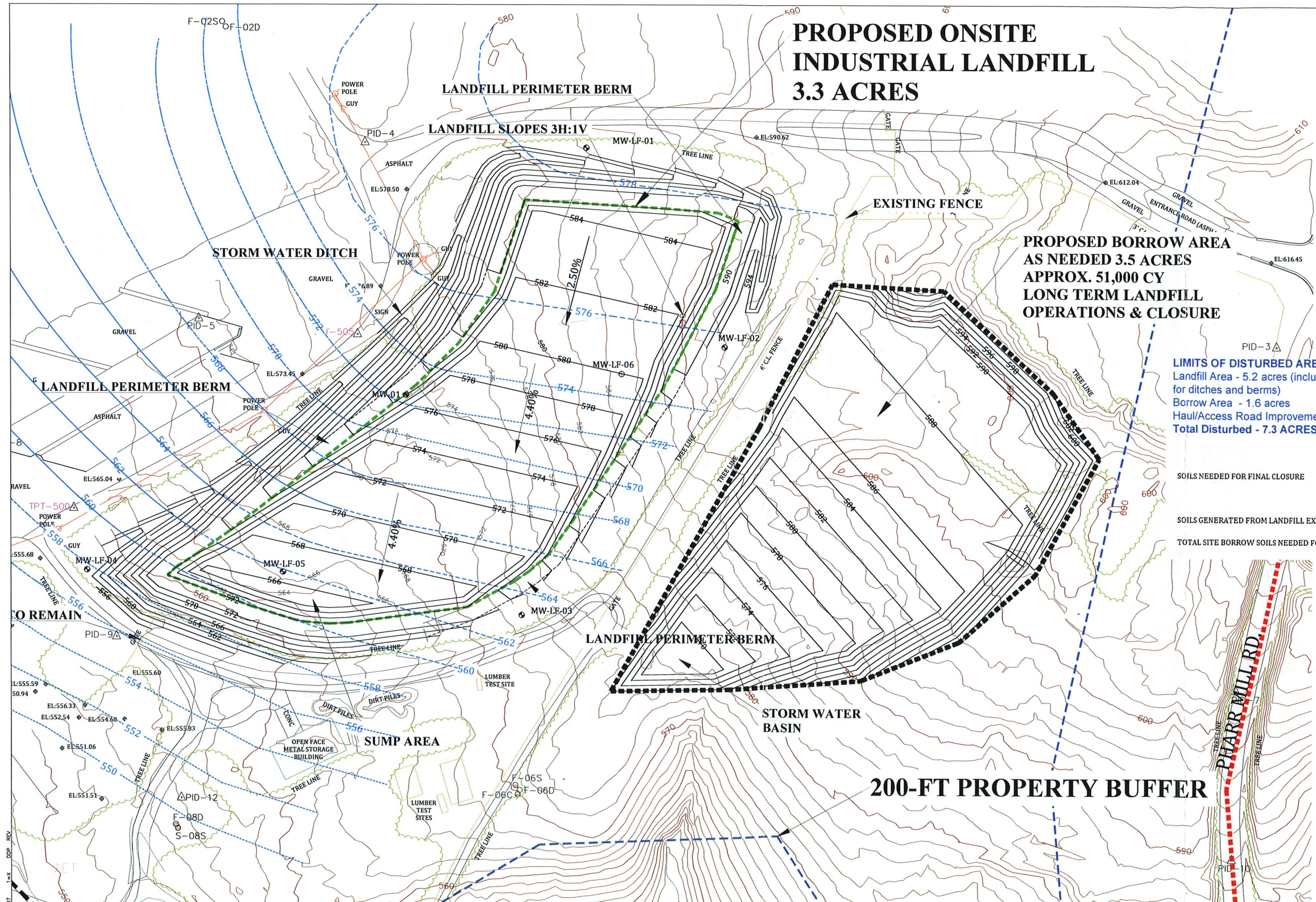
- REPLACEMENT TREE LOCATION
- HERITAGE TREE PER UDO CHAPTER 14B.02., Definitions
- INVENTORIED TREE PER UDO CHAPTER 141.04.04.C.3.g., Tree Survey
- GRASSY AREA
- PROPOSED LANDFILL & BORROW AREA
- TREE REPLACEMENT AREA PROVIDING SCREENING. 32 TREES OF 3" CALIPER SHALL BE PLANTED IN THE TREE REPLACEMENT AREA.



VENATOR HARRISBURG, NORTH CAROLINA			
HERITAGE & REPLACEMENT TREES PROPOSED LANDFILL SITE PLAN			
NO.	REVISIONS	DATE	BY
1	ADDED TREES 15 THRU 17	4/4/24	DCM
2	REVISED BORROW AREA	10/26/23	DCM
3	INCORPORATED COMMENTS	9/26/22	DCM
4	INITIAL ISSUE	8/25/22	DCM
NO.	REVISIONS	DATE	BY
000	G-0-HERITAGE		D

PROPOSED ONSITE INDUSTRIAL LANDFILL 3.3 ACRES

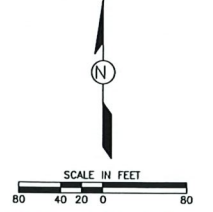
- LEGEND:**
- EXISTING TOPOGRAPHIC CONTOUR 2-FT INTERVAL
 - PROPOSED CONTOUR (2-FT INTERVAL)
 - PROPERTY BOUNDARY
 - 200-FT PROPERTY BUFFER
 - LIMITS OF PROPOSED ONSITE INDUSTRIAL LANDFILL
 - SEASONAL HIGH POTENTIOMETRIC BASED ON 4/2005



LIMITS OF DISTURBED AREA FOR PROPOSED PROJECT
 Landfill Area - 5.2 acres (includes exterior land disturbance limits for ditches and berms)
 Borrow Area - 1.6 acres
 Haul/Access Road Improvements - 0.5 acres
Total Disturbed - 7.3 ACRES

SOILS NEEDED FOR FINAL CLOSURE	12,693 CY
SUBTOTAL	59,331 CY
SOILS GENERATED FROM LANDFILL EXCAVATION	8,501 CY
TOTAL SITE BORROW SOILS NEEDED FOR LANDFILL PROJECT	50,830 CY

THIS PLAN IS FOR DISCUSSION PURPOSES ONLY. DESIGN AND PERMITTING WILL BE PERFORMED IN ACCORDANCE WITH NCDEQ - DIVISION OF WASTE MANAGEMENT RULES AND STATUTES.



NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

PROPOSED ONSITE INDUSTRIAL LANDFILL

VENATOR
 DRAWN BY: DWW
 DESIGN ENGINEER: XXXX

HARISBURG, NC
 PROJECT ENGINEER: XXXX
 PROJECT MANAGER: XXXX

PRELIMINARY SITE PLAN

SCALE: 1"=80'
 DATE: JUNE 2, 2022
 PROJECT NO.: XXXX ABCDE
 AutoCAD 2002
 XXXXXXXX.DWG

DRAWING NO. 1
 REV. NO. 1
 SHEET 1 OF 1



TECHNICAL MEMO

TO	Jonna Stein EHS Manager Venator Chemicals, LLC
FROM	Rick Tarravechia, Harry Carter, ERM
DATE	August 30, 2024
REFERENCE	0646666
SUBJECT	Lagoon Sediment Sampling Results

Dear Jonna:

On July 10, 2024, ERM NC, Inc. (ERM) conducted waste characterization sampling of the sediments within Lagoon 5, located at the Venator Chemical, LLC facility at 5910 Pharr Mill Road, Harrisburg, North Carolina. The purpose of the sampling was to confirm the results of previous waste characterization activities which showed that the lagoon sediments are non-hazardous and are therefore suitable for placement into Venator’s proposed onsite industrial solid waste landfill (ISWLF). Another purpose of the waste characterization was to allay concerns regarding the nature of the sediments and obtain a zoning approval for the proposed ISWLF from the Town of Harrisburg.

1. BACKGROUND

As part of Venator’s waste characterization of the accumulated sediments in Lagoon 5, two prior sampling events have been performed on this material.

In 1997 Chalam Pakala Engineering oversaw collection of 50 samples from the top two feet of sediment and submitted them for analysis for Toxicity Characteristic Leaching Procedure (TCLP) for RCRA 8 metals and one composite sample for pH, corrosivity, reactivity, ignitability, and total organic carbon. Analytical results revealed no samples exceeding TCLP limits. These results are included in Appendix A.

In 2017, Brown and Caldwell collected 18 samples composited from 54 aliquots. These samples were collected from both shallow and deep intervals – up to approximately 15 feet deep. Brown and Caldwell submitted these samples for TCLP analysis for RCRA 8 metals, Pesticides, Herbicides, and pH (corrosivity), reactivity, and ignitability. Samples were also submitted for total analysis for sulfate, chloride, nitrate, nitrite, volatile

organic compounds (VOCs), and select total metals. The TCLP analysis revealed no results exceeding TCLP limits. These results are included in Appendix B.

2. SAMPLE COLLECTION

On July 10, 2024, ERM mobilized to the site (Figure 1) with CCI Environmental Services (CCI) to perform the waste characterization sampling event. After participating in a safety briefing, CCI personnel entered the lagoon using confined space entry protocols. In most locations where the surface of the sediment was not covered by water, the sediment surface was sufficiently firm and dry for CCI personnel to walk on.

CCI performed borings with a hand auger at ten locations (Figure 2) and collected two sediment samples from each location: one shallow (from approximately 2-7 feet depth) and one deep (from approximately 8-12 feet depth). The samples were composited into five shallow composite samples and five deep composite samples, for a total of ten composite sediment samples. ERM provided instruction for sampling locations and collection. Hand augers and all related sampling tools were decontaminated between each composited sample interval. The ten composited sediment samples were placed in laboratory supplied containers and stored in coolers with ice and transported to Pace Analytical Laboratory under chain of custody protocol. The samples were analyzed for TCLP RCRA 8 metals, VOCs, SVOCs, pesticides, herbicides, pH (corrosivity), reactivity, and ignitability. Pace analytical also performed total analyses for nitrate, nitrite, chloride, sulfate, select total metals.

3. ANALYTICAL RESULTS

TCLP analytes for the submitted samples did not indicate any detections above laboratory reporting limits with the exception of chromium in sediment sample SS-01S, which had a TCLP concentration of 0.16 mg/l, well below its regulatory threshold of 5.0 mg/l. None of the samples tested as ignitable, corrosive, or reactive. Analytical results are shown in Table 1.

4. CONCLUSIONS

Analysis of the lagoon 5 sediment samples indicate that they are non-hazardous, as defined under RCRA. These results also confirm the results of the two previous sampling events, which also indicated that the lagoon 5 sediments are non-hazardous. The characterization of the sediments as non-hazardous supports their planned disposition within the proposed onsite ISWLF.

Additionally, although total concentrations of metals are not a factor in hazardous waste determination, total concentrations of metals analyzed during this sampling event are similar to the results of the 2024.

ERM recommends submitting this information to the Town of Harrisburg in response to their request to update the characterization data for the material in this lagoon.

Attachments:

Figure 1 - Site Location Map

Figure 2 - Sediment Boring Locations

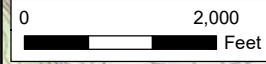
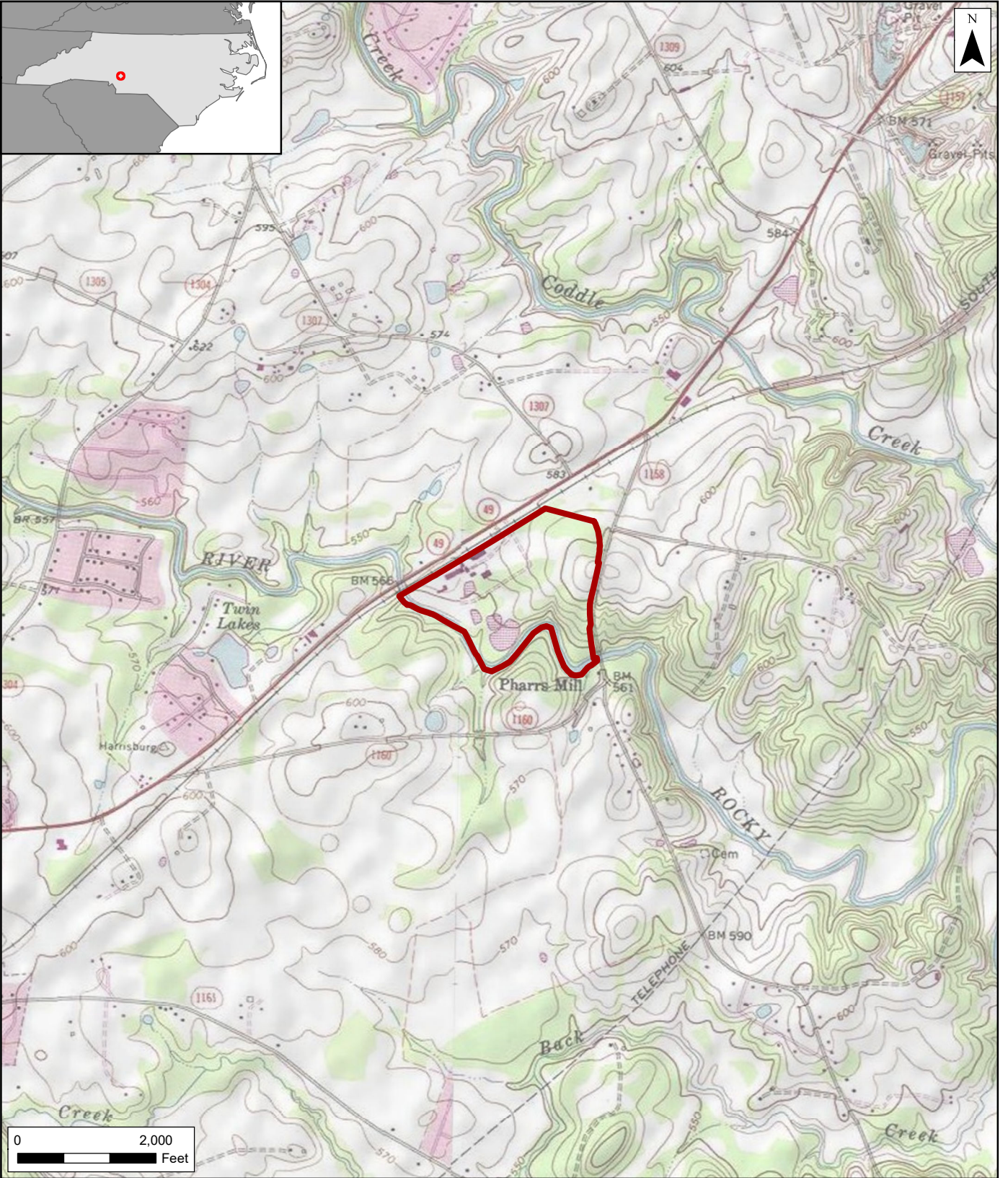
Table 1 - Analytical Data Summary

Appendix A - 1997 Sampling Results

Appendix B - 2017 Sampling Results

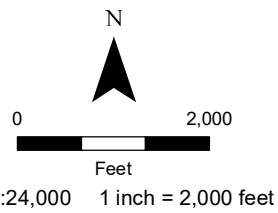
Appendix C - Laboratory Analytical Report

Figures



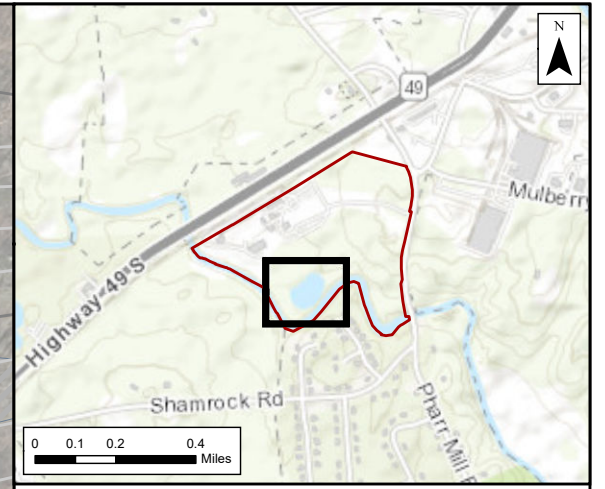
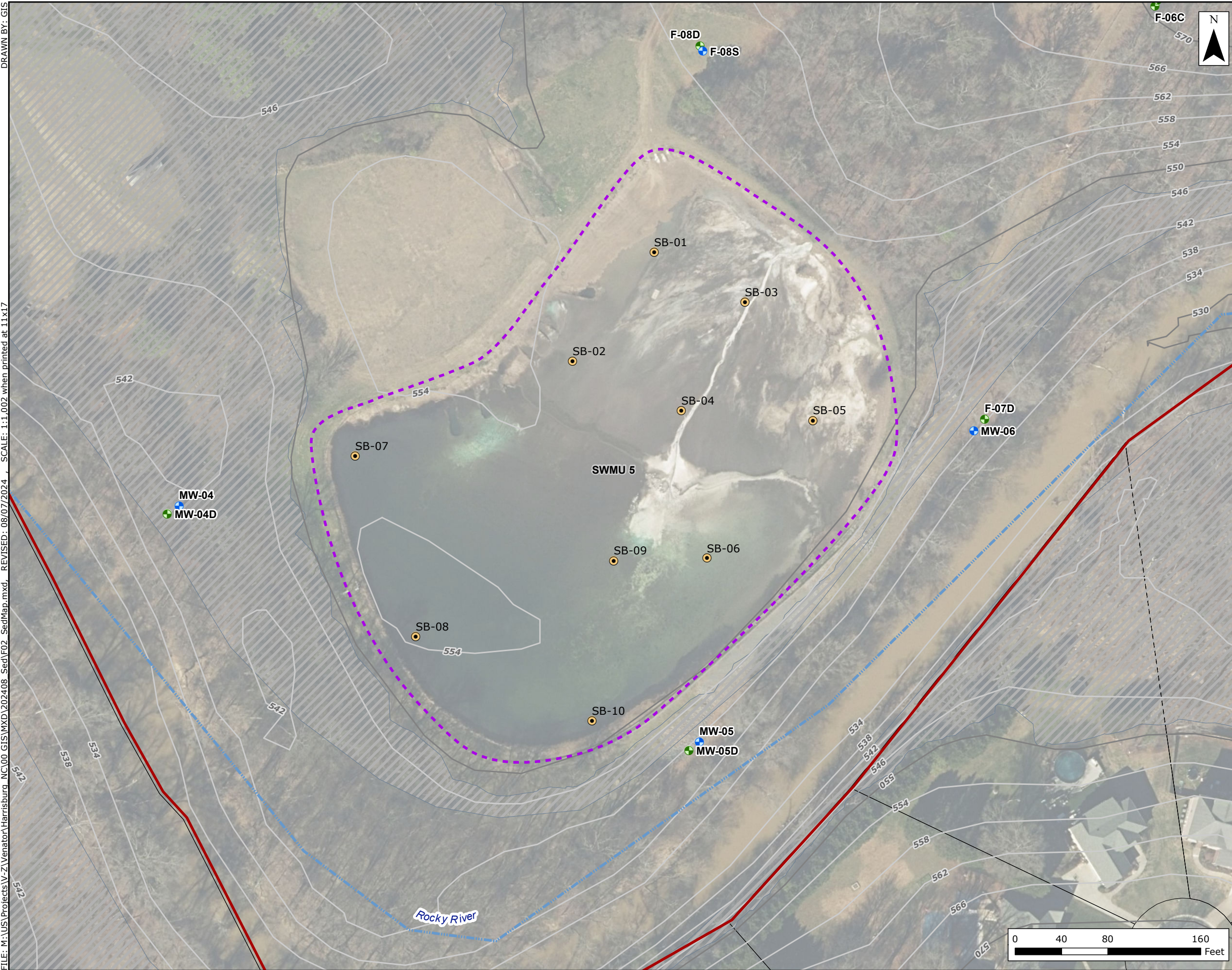
Legend

Site



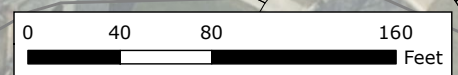
**Figure 1
Site Location Map**

Venator Facility
EPA Facility I.D. 048 467 427
5910 Pharr Mill Road Road
Harrisburg, NC



- Legend**
- Approximate Sediment Sample Location
 - Saporite Monitoring Well
 - Bedrock Monitoring Well
 - Solid Waste Management Unit (SWMU)
 - Site
 - 100 Year Flood Plain

Figure 2
Sediment Boring Locations
 Venator Facility
 EPA Facility I.D. 048 467 427
 5910 Pharr Mill Road Road
 Harrisburg, NC



Tables

Table 1
Analytical Data Summary
Venator - Harrisburg, North Carolina
Harrisburg, North Carolina

		Aliquots										
		SB-01/SB-02 Deep	SB-01/SB-02 Shallow	SB-03/SB-04 Deep	SB-03/SB-04 Shallow	SB-05/SB-06 Deep	SB-05/SB-06 Shallow	SB-07/SB-08 Deep	SB-07/SB-08 Shallow	SB-09/SB-10 Deep	SB-09/SB-10 Shallow	
Location	Hazardous Waste Characterization	SS-01D	SS-01S	SS-02D	SS-02S	SS-03D	SS-03S	SS-04D	SS-04S	SS-05D	SS-05S	
Sample Date	Unit	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	
Analyte												
Metals - EPA 6010B TCLP												
Arsenic	mg/L	5.0	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	
Barium	mg/L	100.0	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	
Cadmium	mg/L	0.5	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
Chromium	mg/L	5.0	< 0.10 U	0.16	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
Lead	mg/L	5.0	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	
Selenium	mg/L	1.0	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	
Silver	mg/L	5.0	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	
RCRA Metals - SW7470A TCLP												
Mercury	mg/L	0.2	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	< 0.0050 U	
VOCs - SW8260D TCLP												
1,1-Dichloroethene	ug/L	700	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	
1,2-Dichloroethane	ug/L	500	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	
1,4-Dichlorobenzene	ug/L	7500	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,M1	< 100 U	
2-Butanone (Methyl ethyl ketone)	ug/L	200000	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	
Benzene	ug/L	500	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	
Carbon tetrachloride	ug/L	500	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,M1	< 100 U	
Chlorobenzene	ug/L	100000	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	
Chloroform	ug/L	6000	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,M1	< 100 U	
Tetrachloroethene	ug/L	700	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	
Trichloroethene	ug/L	500	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	
Vinyl chloride	ug/L	200	< 100 U	< 100 U	< 100 U,v2	< 100 U	< 100 U,v2	< 100 U,v2	< 100 U,v2	< 100 U,v2,M1	< 100 U,v2	
SVOCs - SW8270E TCLP												
1,4-Dichlorobenzene	ug/L	7500	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U,R1	< 50.0 U	< 50.0 U	
2,4,5-Trichlorophenol	ug/L	400000	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U,R1	< 50.0 U	< 50.0 U	
2,4,6-Trichlorophenol	ug/L	2000	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U,R1	< 50.0 U	< 50.0 U	
2,4-Dinitrotoluene	ug/L	130	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U,R1	< 50.0 U	< 50.0 U	
Hexachlorobenzene	ug/L	130	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U,R1	< 50.0 U	< 50.0 U	
Hexachlorobutadiene	ug/L	500	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	
Hexachloroethane	ug/L	3000	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	
m,p-cresol	ug/L	200000	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U,R1	< 50.0 U	< 50.0 U	
Nitrobenzene	ug/L	2000	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U,R1	< 50.0 U	< 50.0 U	
o-Cresol	ug/L	200000	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U,R1	< 50.0 U	< 50.0 U	
Pentachlorophenol	ug/L	100000	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U,M1	< 100 U	< 100 U	
Pyridine	ug/L	5000	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	< 50.0 U	
Pesticides - EPA 8081B TCLP												
Chlordane, Total	ug/L	30	< 5.0 U	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	
Chlorinated camphene/ Toxaphene	ug/L	500	< 10 U	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	< 3.0 U,H2	
cis-Heptachlor epoxide	ug/L	8	< 5.0 U	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	
Endrin	ug/L	20	< 5.0 U	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	
gamma-BHC/HCH (Lindane)	ug/L	400	< 5.0 U	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	
Heptachlor	ug/L	8	< 5.0 U	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	< 0.50 U,H2	
Methoxychlor	ug/L	10000	< 5.0 U	< 1000 U,H2	< 1000 U,H2	< 1000 U,H2	< 1000 U,H2	< 1000 U,H2	< 1000 U,H2	< 1000 U,H2	< 1000 U,H2	
Herbicides - EPA 8151A TCLP												
2,4,5-TP (Silvex)	mg/L	1.0	< 0.00200 U,H3	< 0.00200 U,H3	< 0.00200 U,H3	< 0.00200 U, T8	< 0.00200 U,H3	< 0.00200 U,H3	< 0.00200 U,H3	< 0.00200 U, T8	< 0.00200 U,H3	
2,4-Dichlorophenoxyacetic acid	mg/L	10.0	< 0.00200 U,H3	< 0.00200 U,P9,H3	< 0.00200 U,H3	< 0.00200 U, T8	< 0.00200 U,H3	< 0.00200 U,H3	< 0.00200 U,H3	< 0.00200 U, T8	< 0.00200 U,H3	
pH - EPA 9045D												
pH, Lab	pH units	2-12.5	8.8 H3	8.8 H3	8.9 H3	9.2 H3	9.1 H3	9.2 H3	9.2 H3	9.5 H3	8.2 H3	
Reactive Sulfide - SM4500S2-F												
Sulfide, Reactive	mg/kg	Narrative and descriptive criteria ¹	< 30.9 U	< 31.9 U	< 29.1 U	< 35.9 U	< 36.9 U	< 34.4 U	< 28.8 U	< 32.7 U	< 46.6 U	
Reactive Cyanide - SW9014												
Cyanide, Reactive	mg/kg	Narrative and descriptive criteria ¹	< 3.1 U	< 3.2 U	< 2.9 U	< 3.6 U	< 3.7 U	< 3.4 U	< 2.9 U	< 3.3 U	< 4.7 U	
Flash Point by SW1010B												
Flash Point	deg F	<140	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	
Nitrate and Nitrite - EPA 353.2												
Nitrate as N	mg/kg	NA	5660	4010	4270	4900	3460	2970	4500	3110	8230	
Nitrite + Nitrate as N	mg/kg	NA	5660 H2,H1,M1	4010 H2,H1	4290 H2,H1	4940 H2,H1	3480 H2,H1	2990 H2,H1	4500 H2,H1,M1	3120	8280 H2,H1	
Nitrite as N	mg/kg	NA	< 12.2 U,H2,H1,M1	< 12.6 U,H2,H1	25.3 H2,H1	46.1 H2,H1	22.9 H2,H1	23.7 H2,H1	< 112 U,H2,H1,M1	13.5	52.1 H2,H1	
Chloride - SM4500-CL-E												

Table 1
Analytical Data Summary
Venator - Harrisburg, North Carolina
Harrisburg, North Carolina

		Aliquots										
		SB-01/SB-02 Deep	SB-01/SB-02 Shallow	SB-03/SB-04 Deep	SB-03/SB-04 Shallow	SB-05/SB-06 Deep	SB-05/SB-06 Shallow	SB-07/SB-08 Deep	SB-07/SB-08 Shallow	SB-09/SB-10 Deep	SB-09/SB-10 Shallow	
Location	Hazardous Waste Characterization	SS-01D	SS-01S	SS-02D	SS-02S	SS-03D	SS-03S	SS-04D	SS-04S	SS-05D	SS-05S	
Sample Date		07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	
Analyte	Unit											
Chloride	mg/kg	NA	1200	547 M1	783	570	552	375	489	NA	1200	856
Sulfate - SW9056A												
Sulfate	mg/kg	NA	84.4 N2	70.8 N2	87.4 N2	46.4 N2	56.9 N2	48.0 N2	53.5 N2	66.4 N2	116 N2	78.3 N2
Metals - EPA 6010D												
Calcium ²	mg/kg	NA	72600	105000	52000	106000	48700	111000	75200	75000	94800	101000
Cobalt ²	mg/kg	NA	24.2	67.7	11.2	23.4	27.8	10.000	42.6	37.5	63.8	34.9
Magnesium	mg/kg	NA	81600	107000	109000	146000	90300	100000	40000	45600	82200	51000
Manganese ²	mg/kg	NA	31500	41400	13900	49300	15500	30800	37200	54200	21200	37200
Sodium ²	mg/kg	NA	2260	1850	1540	1350	1150	755	753	866	2060	1150
Zinc ²	mg/kg	NA	67300	77200	47000	82900	44500	74900	46500	49100	84200	76000
Total Metals SW7471												
Mercury ²	mg/kg	NA	0.17	0.27	0.14	0.17	0.29	0.071	0.089	0.1	0.29	0.066
Total VOCs - SW8260D												
1,1,1,2-Tetrachloroethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,1,1-Trichloroethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,1,2,2-Tetrachloroethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,1,2-Trichloroethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,1-Dichloroethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,1-Dichloroethene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,1-Dichloropropene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,2,3-Trichlorobenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,2,3-Trichloropropane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,2,4-Trichlorobenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,2,4-Trimethylbenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,2-Dibromo-3-chloropropane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,2-Dichlorobenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,2-Dichloroethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,2-Dichloropropane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,3,5-Trimethylbenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,3-Dichlorobenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,3-Dichloropropane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
1,4-Dichlorobenzene	ug/kg	NA	85.1	147	33.7	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
2,2-Dichloropropane	ug/kg	NA	< 34.6 U,v2	< 44.9 U,v2	< 31.5 U,v2	< 36.4 U,v2	< 42.0 U,v2	< 72.3 U,v2	< 59.8 U,v2	< 49.8 U,v2	< 59.6 U,v2	< 31.8 U,v2
2-Butanone (Methyl ethyl ketone)	ug/kg	NA	< 692 U	< 899 U	< 630 U	< 727 U	< 840 U	< 1450 U	< 1200 U	< 996 U	< 1190 U	< 636 U
2-Hexanone	ug/kg	NA	< 346 U	< 449 U	< 315 U	< 364 U	< 420 U	< 723 U	< 598 U	< 498 U	< 596 U	< 318 U
4-Chlorotoluene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
4-Isopropyltoluene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
4-Methyl-2-pentanone	ug/kg	NA	< 346 U	< 449 U	< 315 U	< 364 U	< 420 U	< 723 U	< 598 U	< 498 U	< 596 U	< 318 U
Acetone	ug/kg	NA	< 692 U	< 899 U	< 630 U	< 727 U	< 840 U	< 1450 U	< 1200 U	< 996 U	< 1190 U	< 636 U
Benzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Bromobenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Bromodichloromethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Bromoform	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Bromomethane	ug/kg	NA	< 138 U,IH,IK	< 180 U,IH,IK	< 126 U,IH,IK	< 145 U,IH,IK	< 168 U,IH,IK	< 289 U,IH,IK	< 239 U,IH,IK	< 199 U,IH,IK	< 238 U,IH,IK	< 127 U,IH,IK
Carbon tetrachloride	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Chlorobenzene	ug/kg	NA	< 34.6 U	< 44.9 U	37.7	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Chlorobromomethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Chloroethane	ug/kg	NA	< 69.2 U	< 89.9 U	< 63.0 U	< 72.7 U	< 84.0 U	< 145 U	< 120 U	< 99.6 U	< 119 U	< 63.6 U
Chloroform	ug/kg	NA	199	116	40.1	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Chloromethane	ug/kg	NA	< 69.2 U	< 89.9 U	< 63.0 U	< 72.7 U	< 84.0 U	< 145 U	< 120 U	< 99.6 U	< 119 U	< 63.6 U
cis-1,2-Dichloroethene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
cis-1,3-Dichloropropene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Dibromochloromethane	ug/kg	NA	47.1	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Dibromomethane	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Dichlorodifluoromethane (Freon 12)	ug/kg	NA	< 69.2 U	< 89.9 U	< 63.0 U	< 72.7 U	< 84.0 U	< 145 U	< 120 U	< 99.6 U	< 119 U	< 63.6 U
Ethylbenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Ethylene dibromide	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U

Table 1
Analytical Data Summary
Venator - Harrisburg, North Carolina
Harrisburg, North Carolina

		Aliquots	SB-01/SB-02 Deep	SB-01/SB-02 Shallow	SB-03/SB-04 Deep	SB-03/SB-04 Shallow	SB-05/SB-06 Deep	SB-05/SB-06 Shallow	SB-07/SB-08 Deep	SB-07/SB-08 Shallow	SB-09/SB-10 Deep	SB-09/SB-10 Shallow
Location	Hazardous Waste Characterization	SS-01D	SS-01S	SS-02D	SS-02S	SS-03D	SS-03S	SS-04D	SS-04S	SS-05D	SS-05S	
Sample Date		07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	07/10/2024	
Analyte	Unit											
Hexachlorobutadiene	ug/kg	NA	< 69.2 U	< 89.9 U	< 63.0 U	< 72.7 U	< 84.0 U	< 145 U	< 120 U	< 99.6 U	< 119 U	< 63.6 U
Isopropyl ether	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Isopropylbenzene (Cumene)	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
m,p-Xylenes	ug/kg	NA	< 69.2 U	< 89.9 U	< 63.0 U	< 72.7 U	< 84.0 U	< 145 U	< 120 U	< 99.6 U	< 119 U	< 63.6 U
Methyl tert-butyl ether	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Methylene chloride	ug/kg	NA	< 138 U	< 180 U	< 126 U	< 145 U	< 168 U	< 289 U	< 239 U	< 199 U	< 238 U	< 127 U
Naphthalene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
n-Butylbenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
n-Propylbenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
o-Chlorotoluene (2-chlorotoluene)	ug/kg	NA	< 34.6 U	< 44.9 U	36.9	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
o-Xylene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
sec-Butylbenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Styrene	ug/kg	NA	< 34.6 U	< 44.9 U	35.1	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
tert-Butylbenzene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Tetrachloroethene	ug/kg	NA	< 34.6 U	111	235	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Toluene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
trans-1,2-Dichloroethene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
trans-1,3-Dichloropropene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Trichloroethene	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Trichlorofluoromethane (Freon 11)	ug/kg	NA	< 34.6 U	< 44.9 U	< 31.5 U	< 36.4 U	< 42.0 U	< 72.3 U	< 59.8 U	< 49.8 U	< 59.6 U	< 31.8 U
Vinyl acetate	ug/kg	NA	< 346 U	< 449 U	< 315 U	< 364 U	< 420 U	< 723 U	< 598 U	< 498 U	< 596 U	< 318 U
Vinyl chloride	ug/kg	NA	< 69.2 U	< 89.9 U	< 63.0 U	< 72.7 U	< 84.0 U	< 145 U	< 120 U	< 99.6 U	< 119 U	< 63.6 U
Xylene, Total	ug/kg	NA	< 69.2 U	< 89.9 U	< 63.0 U	< 72.7 U	< 84.0 U	< 145 U	< 120 U	< 99.6 U	< 119 U	< 63.6 U
% Moisture - SW-846												
Moisture	%	NA	67.7 N2	68.8 N2	65.7 N2	72.3 N2	72.8 N2	71.1 N2	65.2 N2	69.7 N2	78.6 N2	68.3 N2

Notes:
 % = Percent
 deg F = degrees Fahrenheit
 mg/kg = milligrams per kilogram
 mg/L = milligrams per liter
 pH units = pH units
 ug/kg = micrograms per kilogram
 ug/L = micrograms per liter
 D3-Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
 E-Analyte concentration exceeded the calibration range. The reported result is estimated.
 H1-Analysis conducted outside the EPA method holding time.
 H2-Extraction or preparation conducted outside EPA method holding time.
 H3-Sample was received or analysis requested beyond the recognized method holding time.
 IH-This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
 IK-The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.
 M0-Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
 M1-Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
 MH-Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.
 N2-The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
 P9-RPD between the primary and confirmatory analysis exceeded 40%.
 R1-RPD value was outside control limits.
 S0-Surrogate recovery outside laboratory control limits.
 v1-The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
 v2-The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
 v3-The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.
 Chloride in SS-04S not analyzed due to lab error

Appendix A

1997 Results

Summary of Sludge Sampling Analytical Test Results for Lagoon #5

**Chemical Specialties, Inc.
Harrisburg, North Carolina
CPEES Project No. 1020-001**

Constituent	RL	TCLP Threshold Limit	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic¹	0.2	5.0	0.223	1.02	0.665	ND	0.975	0.36	0.498	0.872	0.926	0.742
Barium¹	0.02	100.0	0.967	0.192	0.245	0.199	0.24	0.895	0.743	0.324	0.235	0.275
Cadmium¹	0.005	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium¹	0.01	5.0	0.0873	0.199	ND	ND	ND	0.0206	0.116	0.0353	ND	ND
Lead¹	0.1	5.0	ND	ND	ND	ND	0.109	ND	ND	ND	ND	ND
Selenium¹	0.1	1.0	0.306	0.423	ND	0.481	0.104	0.326	0.211	0.428	0.101	0.122
Silver¹	0.01/0.02	5.0	ND	ND	0.0301	0.0213	0.019	ND	ND	ND	ND	ND
Mercury²	0.0002	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Constituent	RL	TCLP Threshold Limit	S-11	S-12	S-13	S-14	S-15	S-16	S-17	S-18	S-19	S-20
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic¹	0.2	5.0	1.094	0.593	0.867	0.507	0.24	0.52	0.304	0.942	0.852	1.06
Barium¹	0.02	100.0	0.226	0.567	0.488	0.234	0.282	0.293	0.294	0.56	0.609	0.26
Cadmium¹	0.005	1.0	ND	ND	ND	ND	ND	ND	ND	0.0157	0.00859	ND
Chromium¹	0.01	5.0	ND	0.0101	0.0524	ND	ND	ND	ND	0.739	0.684	ND
Lead¹	0.1	5.0	ND	ND	ND	ND	ND	ND	ND	0.131	0.137	ND
Selenium¹	0.1	1.0	0.375	0.33	ND	ND	ND	0.227	0.346	ND	ND	ND
Silver¹	0.01/0.02	5.0	ND	ND	0.0329	0.104	ND	ND	ND	ND	ND	ND
Mercury²	0.0002	0.2	ND	0.0011	ND	ND	ND	ND	ND	ND	ND	ND

Notes: All Method Blanks are ND, RL = Method Report Limit

- 1) (1) SW846 methods 1311/6010, (2) SW846 Methods 1311/7470, (3) SW846 Method 9045,
- 2) (4) SW846 Method 1010, (5) Sw846 9060M, (6) EPA method 7.3.3.2, and (7) EPA Method 7.3.4.2
- 3) S-1 through S-8, S-11 through S-13, S-17, S-29, and S-36 were reported on September 15, 1997
- 4) S-9, S-10, S-14 through S-16, S-18 through S-22, S-24 through S-28 were reported on September 23, 1997
- 5) S-30 through S-35, S-37 through S-50 were reported on September 23, 1997

Chemical Specialties, Inc.
Harrisburg, North Carolina
CPEES Project No. 1020-001

Constituent	RL	TCLP Threshold Limit	S-21	S-22	S-23	S-24	S-25	S-26	S-27	S-28	S-29	S-30
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic¹	0.2	5.0	0.594	0.928	0.923	0.395	0.312	0.277	0.389	0.491	0.584	ND
Barium¹	0.02	100.0	0.199	0.207	0.223	0.0415	0.31	0.287	0.249	0.314	0.294	0.248
Cadmium¹	0.005	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium¹	0.01	5.0	ND	ND	ND	ND	0.0291	0.0329	ND	0.0234	ND	0.147
Lead¹	0.1	5.0	ND	ND	ND	ND	ND	ND	ND	0.608	0.153	ND
Selenium¹	0.1	1.0	0.117	0.204	ND	ND	0.324	ND	ND	ND	ND	ND
Silver¹	0.01/0.02	5.0	ND	ND	0.0403	ND	ND	ND	ND	ND	0.029	0.107
Mercury²	0.0002	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Constituent	RL	TCLP Threshold Limit	S-31	S-32	S-33	S-34	S-35	S-36	S-37	S-38	S-39	S-40
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic¹	0.2	5.0	0.937	1.07	0.9	0.84	0.674	0.31	0.601	0.586	0.611	0.611
Barium¹	0.02	100.0	0.356	0.267	0.642	0.723	2.36	0.47	0.763	0.503	0.97	0.992
Cadmium¹	0.005	1.0	ND	ND	ND	0.174	ND	ND	0.00781	0.00708	0.0413	0.485
Chromium¹	0.01	5.0	0.247	0.591	0.129	0.376	0.136	ND	1.05	0.547	0.278	0.221
Lead¹	0.1	5.0	0.176	ND	ND	0.297	ND	ND	0.253	0.197	0.177	0.24
Selenium¹	0.1	1.0	0.231	ND	ND	ND	ND	0.118	ND	ND	ND	ND
Silver¹	0.01	5.0	0.0114	0.0612	0.0329	0.0104	0.0209	ND	0.0404	0.0509	0.0168	0.0227
Mercury²	0.0002	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes: All Method Blanks are ND, RL = Method Report Limit

- 1) (1) SW846 methods 1311/6010, (2) SW846 Methods 1311/7470, (3) SW846 Method 9045,
- 2) (4) SW846 Method 1010, (5) Sw846 9060M, (6) EPA method 7.3.3.2, and (7) EPA Method 7.3.4.2
- 3) S-1 through S-8, S-11 through S-13, S-17, S-29, and S-36 were reported on September 15, 1997
- 4) S-9, S-10, S-14 through S-16, S-18 through S-22, S-24 through S-28 were reported on September 23, 1997
- 5) S-30 through S-35, S-37 through S-50 were reported on September 23, 1997

Summary of Sludge Sampling Analytical Test Results for Lagoon #5

**Chemical Specialties, Inc.
Harrisburg, North Carolina
CPEES Project No. 1020-001**

Constituent	RL	TCLP Threshold Limit	S-41	S-42	S-43	S-44	S-45	S-46	S-47	S-48	S-49	S-50
	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic¹	0.2	5.0	0.769	0.695	ND	0.868	0.724	0.418	0.399	0.39	0.788	0.524
Barium¹	0.02	100.0	0.771	0.571	0.53	1.31	2.24	0.439	0.0893	1.05	0.794	0.343
Cadmium¹	0.005	1.0	0.0787	0.0208	ND	ND	ND	ND	ND	0.378	0.00772	0.0255
Chromium¹	0.01	5.0	0.155	0.0131	0.0621	0.102	0.138	0.0816	0.022	0.0335	0.0441	0.0934
Lead¹	0.1	5.0	0.205	0.133	ND	ND	0.19	0.172	0.278	0.134	0.115	0.242
Selenium¹	0.1	1.0	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND
Silver¹	0.01/0.02	5.0	0.0185	0.0528	ND	0.0228	0.0363	0.0903	0.0776	0.0249	0.0473	0.0724
Mercury²	0.0002	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Constituent	Units	Comp. Sample										
pH³		12										
Ignitibility⁴	deg F	ND										
Reactive Cyanide⁶	mg/Kg	ND										
Reactive Sulfides⁷	mg/Kg	ND										
Total Organic Carbon⁵	mg/Kg	1380										

Notes: All Method Blanks are ND, RL = Method Report Limit

- 1) (1) SW846 methods 1311/6010, (2) SW846 Methods 1311/7470, (3) SW846 Method 9045,
- 2) (4) SW846 Method 1010, (5) Sw846 9060M, (6) EPA method 7.3.3.2, and (7) EPA Method 7.3.4.2
- 3) S-1 through S-8, S-11 through S-13, S-17, S-29, and S-36 were reported on September 15, 1997
- 4) S-9, S-10, S-14 through S-16, S-18 through S-22, S-24 through S-28 were reported on September 23, 1997
- 5) S-30 through S-35, S-37 through S-50 were reported on September 23, 1997

Appendix B

2017 Results

Table 6. Sludge Analytical Results
Chemical Specialties LLC Facility
5910 Pharr Mill Road
Harrisburg, Cabarrus County, North Carolina
EPA Facility I.D. No. 048 467 427

Analytical Method	Chemical	Unit	Sample Location	G-1-L	G-1-U	G-2-L	G-2-U	G-3-L	G-3-U	G-4-L	G-4-U	G-5-L	G-5-U	G-6-L	G-6-U	G-7-L	G-7-U	G-8-L	G-8-U	G-9-L	G-9-U
			Sample Date	12/7/2017	12/7/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/7/2017	12/7/2017	12/6/2017	12/6/2017	12/5/2017	12/5/2017	12/7/2017	12/7/2017	12/6/2017	12/6/2017	12/5/2017	12/5/2017
Metals - SW6010	Arsenic	mg/kg		1,060	513	1,100	679	826	666	648	< 537	< 576	350	698	< 164	< 423	1,610	847	540	300	648
	Barium	mg/kg		< 230	< 179	165	131	225	98	< 253	< 268	< 288	< 166	189	< 82.0	< 211	< 266	< 283	169	182	66.5
	Cadmium	mg/kg		< 45.9	< 35.9	90.2	10.5	130	16.2	84.1	< 53.7	< 57.6	56.3	91.4	< 16.4	< 42.3	< 53.3	93.6	68.7	9.2	52.5
	Calcium	mg/kg		65,600	62,300	54,700	46,800	33,400	38,900	61,100	56,000	74,300	59,900	60,600	15,300	110,000	84,800	54,700	69,600	55,400	126,000
	Chromium	mg/kg		4,000	1,150	518	598	596	425	533	< 268	< 288	295	450	< 82.0	268	< 266	< 283	195	91.1	237
	Cobalt	mg/kg		< 230	< 179	15.5	21.8	4.9	41.1	< 253	< 268	< 288	< 166	8.5	< 82.0	< 211	< 266	< 283	< 123	13	7.3
	Lead	mg/kg		< 230	< 179	1,040	43.2	1,710	92.3	1,030	< 268	< 288	< 166	921	< 82.0	< 211	< 266	< 283	< 123	24.9	544
	Magnesium	mg/kg		82,400	101,000	101,000	101,000	70,400	85,300	87,500	113,000	97,000	107,000	143,000	3,120	95,000	82,300	148,000	112,000	75,200	117,000
	Manganese	mg/kg		49,700	60,900	12,400	14,400	4,580	9,470	27,100	50,500	45,300	31,200	8,900	< 82.0	55,600	57,000	14,400	22,800	6,470	10,700
	Selenium	mg/kg		< 459	< 359	< 6.2	< 3.3	< 3.5	< 2.3	< 507	< 537	< 576	< 332	< 4.5	< 164	< 423	< 533	< 565	< 246	< 2.3	< 4.0
	Silver	mg/kg		< 230	< 179	3.3	2.1	6.5	2.6	< 253	< 268	< 288	< 166	5	< 82.0	< 211	< 266	< 283	< 123	< 1.2	2.9
	Sodium	mg/kg		< 230000	< 179000	< 3120	1,920	2,760	1,500	< 253000	< 268000	< 288000	< 166000	3,350	< 82000	< 211000	< 266000	< 283000	< 123000	1,790	2,610
Zinc	mg/kg		69,800	77,200	74,000	30,500	59,400	30,100	108,000	88,100	90,800	59,500	58,800	888	96,300	97,800	76,500	52,000	22,100	50,000	
Mercury - SW7471	Mercury	mg/kg		0.12	0.099	0.27	0.27	< 0.020	0.13	0.16	< 0.023	0.2	0.032	< 0.024	0.091	0	0.16	0.057	0.13	0.97	0.083
TCLP Metals - SW6010	Arsenic	mg/L		< 0.050	< 0.050	0.064	< 0.050	< 0.050	< 0.050	0.32	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.061	< 0.050	< 0.050	
	Barium	mg/L		0.42	0.85	0.54	< 0.25	0.55	< 0.25	0.71	< 0.25	0.68	0.62	0.62	< 0.25	1	< 0.25	0.34	0.41	< 0.25	0.45
	Cadmium	mg/L		< 0.0050	0.066	0.54	< 0.0050	0.099	< 0.0050	0.59	0.02	0.18	0.32	0.17	< 0.0050	0	0.078	0.2	< 0.0050	< 0.0050	0.4
	Chromium	mg/L		0.057	0.21	< 0.050	0.088	0.092	< 0.050	0.22	0.062	< 0.050	0.16	< 0.050	< 0.050	< 0.050	0.078	0.08	< 0.050	< 0.050	< 0.050
	Lead	mg/L		< 0.025	0.064	0.098	< 0.025	< 0.025	< 0.025	0.21	0.072	< 0.025	0.06	< 0.025	< 0.025	0	0.078	0.055	< 0.025	0.03	0.059
	Selenium	mg/L		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Silver	mg/L		0.025 UJ	0.025 UJ	< 0.025	< 0.025	< 0.025	< 0.025	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	< 0.025	< 0.025	0.025 UJ	0.025 UJ	0.025 UJ	0.025 UJ	< 0.025	< 0.025
TCLP Mercury - SW7470	Mercury	mg/L		< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
TCLP Pesticides - SW8081	BHC, gamma (Lindane)	mg/L		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	Chlordane (technical)	mg/L		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
	Endrin	mg/L		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	Heptachlor	mg/L		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	Heptachlor epoxide	mg/L		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	Methoxychlor	mg/L		< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000	< 1000
Toxaphene	mg/L		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
TCLP Herbicides - SW8151	2,4-D	mg/L		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silvex (2,4,5-TP)	mg/L		< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Reactive Cyanide - SW9014	Cyanide, Reactive	mg/kg		< 5.2	< 5.4	< 6.2	< 4.9	< 5.4	< 3.1	< 6.9	< 6.2	< 6.0	< 5.4	< 3.4	< 6.1	< 6.4	< 5.7	< 4.6	< 3.8	< 5.3	
pH - SW9045	pH	SU		9.1J	9.2J	9	9.4	9.4	8.9	9.0J	9.1J	9.2	9	9.1	9.3	9.1J	8.6J	9.2	9.2	12.1	10
Anions - SW9056A	Chloride	mg/kg		969	1,050	1,120	567	1,520	631	1,670	1,410	1,350	1,040	1,240	995	1,170	1,250	1,360	768	459	1,510
	Sulfate	mg/kg		< 262	< 269	< 312	< 245	< 269	< 156	< 344	< 311	< 300	< 269	< 270	< 170	< 309	< 320	< 288	< 231	< 191	326
Reactive Sulfide - A4500S2F	Sulfide, Reactive	mg/kg		< 52.4	< 53.8	< 62.2	< 48.6	< 53.7	< 31.1	< 68.6	< 62.2	< 59.7	< 53.6	< 54.0	< 34.1	< 61.3	< 63.9	< 57.2	< 46.1	< 38.1	< 53.0
Nitrogen - E353.2	Nitrate (as N)	mg/kg		6,950	7,150	2,740	2580 J	2,600	2,060	10,100	7,810	9,310	8,600	8,120	4,430	12,000	13,000	10,000	7080 J	3,810	8,940
	Nitrite (as N)	mg/kg		< 251	< 244	< 307	< 237	< 250	< 145	374	< 302	585	525	567	338	612	485	573	401 J	191	646
Flashpoint - SW1010	Flash point	DEG F		> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200	> 200

Table 6. Sludge Analytical Results
 Chemical Specialties LLC Facility
 5910 Pharr Mill Road
 Harrisburg, Cabarrus County, North Carolina
 EPA Facility I.D. No. 048 467 427

Analytical Method	Chemical	Unit	Sample Location	G-1-L	G-1-U	G-2-L	G-2-U	G-3-L	G-3-U	G-4-L	G-4-U	G-5-L	G-5-U	G-6-L	G-6-U	G-7-L	G-7-U	G-8-L	G-8-U	G-9-L	G-9-U	
			Sample Date	12/7/2017	12/7/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/7/2017	12/7/2017	12/6/2017	12/6/2017	12/5/2017	12/5/2017	12/7/2017	12/7/2017	12/6/2017	12/6/2017	12/5/2017	12/5/2017	
VOCs - SW8260	1,1,1,2-Tetrachloroethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA	
	1,1,1-Trichloroethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA	
	1,1,2,2-Tetrachloroethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	
	1,1,2-Trichloroethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA	
	1,1-Dichloroethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA	
	1,1-Dichloroethene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA	
	1,1-Dichloropropene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA	
	1,2,3-Trichlorobenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2,3-Trichloropropane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2,4-Trichlorobenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2,4-Trimethylbenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2-Dibromo-3-chloropropane (DBCP)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2-Dibromoethane (EDB)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2-Dichlorobenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,2-Dichloroethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	1,2-Dichloropropane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	1,2-Dimethylbenzene (o-Xylene)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,3,5-Trimethylbenzene (mesitylene)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,3-Dichlorobenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	1,3-Dichloropropane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	1,4-Dichlorobenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	2,2-Dichloropropane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	2-Butanone (MEK)	µg/kg		< 524	< 538	NA	NA	NA	NA	NA	< 689	< 622	< 599	< 538	NA	NA	< 617	< 639	< 577	< 463	NA	NA
	2-Chlorotoluene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	2-Hexanone	µg/kg		< 262	< 269	NA	NA	NA	NA	NA	< 344	< 311	< 300	< 269	NA	NA	< 309	< 320	< 288	< 231	NA	NA
	4-Chlorotoluene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	4-Isopropyltoluene (p-Cymene)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	4-Methyl-2-pentanone (MIBK)	µg/kg		< 262	< 269	NA	NA	NA	NA	NA	< 344	< 311	< 300	< 269	NA	NA	< 309	< 320	< 288	< 231	NA	NA
	Acetone	µg/kg		< 524	< 538	NA	NA	NA	NA	NA	< 689	< 622	< 599	< 538	NA	NA	< 617	< 639	< 577	< 463	NA	NA
	Benzene	µg/kg		138	144	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	Bromobenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	Bromochloromethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	Bromodichloromethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	Bromoform	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	Bromomethane	µg/kg		< 52.4	< 53.8	NA	NA	NA	NA	NA	< 68.9	< 62.2	< 59.9	< 53.8	NA	NA	< 61.7	< 63.9	< 57.7	< 46.3	NA	NA
	Carbon tetrachloride	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	Chlorobenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	Chloroethane	µg/kg		< 52.4	< 53.8	NA	NA	NA	NA	NA	< 68.9	< 62.2	< 59.9	< 53.8	NA	NA	< 61.7	< 63.9	< 57.7	< 46.3	NA	NA
	Chloroform	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	Chloromethane	µg/kg		< 52.4	< 53.8	NA	NA	NA	NA	NA	< 68.9	< 62.2	< 59.9	< 53.8	NA	NA	< 61.7	< 63.9	< 57.7	< 46.3	NA	NA
cis-1,2-Dichloroethene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	
cis-1,3-Dichloropropene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	
Dibromochloromethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	
Dibromomethane	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	
Dichlorodifluoromethane (Freon 12)	µg/kg		< 52.4	< 53.8	NA	NA	NA	NA	NA	< 68.9	< 62.2	< 59.9	< 53.8	NA	NA	< 61.7	< 63.9	< 57.7	< 46.3	NA	NA	
Diisopropyl ether (DIPE)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA	
Ethylbenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	
Hexachlorobutadiene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	
Isopropylbenzene (Cumene)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	
Methylene chloride	µg/kg		< 105	< 108	NA	NA	NA	NA	NA	< 138	< 124	< 120	< 108	NA	NA	< 123	< 128	< 115	< 92.6	NA	NA	
Naphthalene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA	

Table 6. Sludge Analytical Results
Chemical Specialties LLC Facility
5910 Pharr Mill Road
Harrisburg, Cabarrus County, North Carolina
EPA Facility I.D. No. 048 467 427

Analytical Method	Chemical	Unit	Sample Location	G-1-L	G-1-U	G-2-L	G-2-U	G-3-L	G-3-U	G-4-L	G-4-U	G-5-L	G-5-U	G-6-L	G-6-U	G-7-L	G-7-U	G-8-L	G-8-U	G-9-L	G-9-U
			Sample Date	12/7/2017	12/7/2017	12/5/2017	12/5/2017	12/5/2017	12/5/2017	12/7/2017	12/7/2017	12/6/2017	12/6/2017	12/5/2017	12/5/2017	12/7/2017	12/7/2017	12/6/2017	12/6/2017	12/5/2017	12/5/2017
VOCs - SW8260 (continued)	n-Butylbenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	n-Propylbenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	sec-Butylbenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	Styrene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	tert-Butyl methyl ether (MTBE)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	tert-Butylbenzene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	Tetrachloroethene (PCE)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	Toluene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	trans-1,2-Dichloroethene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	trans-1,3-Dichloropropene	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	28.8 UJ	< 23.1	NA	NA
	Trichloroethene (TCE)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	Trichlorofluoromethane (Freon 11)	µg/kg		< 26.2	< 26.9	NA	NA	NA	NA	< 34.4	< 31.1	< 30.0	< 26.9	NA	NA	< 30.9	< 32.0	< 28.8	< 23.1	NA	NA
	Vinyl acetate	µg/kg		< 262	< 269	NA	NA	NA	NA	< 344	< 311	< 300	< 269	NA	NA	< 309	< 320	28.8 UJ	< 231	NA	NA
	Vinyl chloride	µg/kg		< 52.4	< 53.8	NA	NA	NA	NA	< 68.9	< 62.2	< 59.9	< 53.8	NA	NA	< 61.7	< 63.9	< 57.7	< 46.3	NA	NA
	Xylenes, m & p	µg/kg		< 52.4	< 53.8	NA	NA	NA	NA	< 68.9	< 62.2	< 59.9	< 53.8	NA	NA	< 61.7	< 63.9	57.7 UJ	< 46.3	NA	NA
Xylenes, total	µg/kg		< 52.4	< 53.8	NA	NA	NA	NA	< 68.9	< 62.2	< 59.9	< 53.8	NA	NA	< 61.7	< 63.9	57.7 UJ	< 46.3	NA	NA	
Percent Moisture - ASTM D2974-87	Percent Moisture	%		80.9	81.4	84.0	79.6	81.4	67.9	85.5	83.9	83.3	81.4	81.5	70.7	83.8	84.4	82.7	78.4	73.8	81.2

Notes:

- µg/kg - micrograms per kilogram.
- < - less than laboratory reporting limit.
- DEG F - degrees Fahrenheit.
- ID - identification.
- mg/kg - milligrams per kilogram.
- mg/L - milligrams per liter.
- NA - not analyzed.
- SU - standard pH units.
- TCLP - toxicity characteristic leaching procedure.
- VOCs - volatile organic compounds.

Appendix C

2024 Laboratory Data Sheets



August 19, 2024

Ms. Jonna Stein
Venator Chemicals, LLC.
P.O. Box 1330
Harrisburg, NC 28075

RE: Project: Sludge
Pace Project No.: 92741256

Dear Ms. Stein:

Enclosed are the analytical results for sample(s) received by the laboratory on July 11, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet
- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA
- Pace Analytical Services - Indianapolis
- Pace Analytical Services - Ormond Beach
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jonathan W Biddix
jonathan.biddix@pacelabs.com
704-977-0978
Project Manager

Enclosures

cc: Harry Carter, ERM
ERM EDD
Alan Martin, ERM
Chris Means, ERM



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: Sludge
Pace Project No.: 92741256

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
 ANAB DOD-ELAP Rad Accreditation #: L2417
 ANABISO/IEC 17025:2017 Rad Cert#: L24170
 Alabama Certification #: 41590
 Arizona Certification #: AZ0734
 Arkansas Certification
 California Certification #: 2950
 Colorado Certification #: PA01547
 Connecticut Certification #: PH-0694
 EPA Region 4 DW Rad
 Florida/TNI Certification #: E87683
 Georgia Certification #: C040
 Guam Certification
 Hawaii Certification
 Idaho Certification
 Illinois Certification
 Indiana Certification
 Iowa Certification #: 391
 Kansas Certification #: E-10358
 Kentucky Certification #: KY90133
 KY WW Permit #: KY0098221
 KY WW Permit #: KY0000221
 Louisiana DHH/TNI Certification #: LA010
 Louisiana DEQ/TNI Certification #: 04086
 Maine Certification #: 2023021
 Maryland Certification #: 308
 Massachusetts Certification #: M-PA1457
 Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
 Montana Certification #: Cert0082
 Nebraska Certification #: NE-OS-29-14
 Nevada Certification #: PA014572023-03
 New Hampshire/TNI Certification #: 297622
 New Jersey/TNI Certification #: PA051
 New Mexico Certification #: PA01457
 New York/TNI Certification #: 10888
 North Carolina Certification #: 42706
 North Dakota Certification #: R-190
 Ohio EPA Rad Approval: #41249
 Oregon/TNI Certification #: PA200002-015
 Pennsylvania/TNI Certification #: 65-00282
 Puerto Rico Certification #: PA01457
 Rhode Island Certification #: 65-00282
 South Dakota Certification
 Tennessee Certification #: TN02867
 Texas/TNI Certification #: T104704188-22-18
 Utah/TNI Certification #: PA014572223-14
 USDA Soil Permit #: 525-23-67-77263
 Vermont Dept. of Health: ID# VT-0282
 Virgin Island/PADEP Certification
 Virginia/VELAP Certification #: 460198
 Washington Certification #: C868
 West Virginia DEP Certification #: 143
 West Virginia DHHR Certification #: 9964C
 Wisconsin Approve List for Rad

Pace Analytical Services Ormond Beach

8 East Tower Circle, Ormond Beach, FL 32174
 Alaska DEC- CS/UST/LUST
 Alabama Certification #: 41320
 California Certification# 3096
 Colorado Certification: FL NELAC Reciprocity
 Connecticut Certification #: PH-0216
 Delaware Certification: FL NELAC Reciprocity
 DoD-ANAB #:ADE-3199
 Florida Certification #: E83079
 Georgia Certification #: 955
 Guam Certification: FL NELAC Reciprocity
 Hawaii Certification: FL NELAC Reciprocity
 Illinois Certification #: 200068
 Indiana Certification: FL NELAC Reciprocity
 Kansas Certification #: E-10383
 Kentucky Certification #: 90050
 Louisiana Certification #: FL NELAC Reciprocity
 Louisiana Environmental Certificate #: 05007
 Maine Certification #: FL01264
 Maryland Certification: #346
 Massachusetts Certification #: M-FL1264

Michigan Certification #: 9911
 Mississippi Certification: FL NELAC Reciprocity
 Missouri Certification #: 236
 Montana Certification #: Cert 0074
 Nebraska Certification: NE-OS-28-14
 Nevada Certification: FL NELAC Reciprocity
 New Hampshire Certification #: 2958
 New Jersey Certification #: FL022
 New York Certification #: 11608
 North Carolina Environmental Certificate #: 667
 North Carolina Certification #: 12710
 North Dakota Certification #: R-216
 Ohio DEP 87780
 Oklahoma Certification #: D9947
 Pennsylvania Certification #: 68-00547
 Puerto Rico Certification #: FL01264
 South Carolina Certification: #96042001
 Tennessee Certification #: TN02974
 Texas Certification: FL NELAC Reciprocity
 US Virgin Islands Certification: FL NELAC Reciprocity
 Utah

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CERTIFICATIONS

Project: Sludge
Pace Project No.: 92741256

Pace Analytical Services Ormond Beach

Utah FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
West Virginia Certification #: 9962C

Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Pace Analytical Services Indianapolis

7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050

Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487
Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002
Maryland Certification #: 324
Massachusetts Certification #: M-TN003
Michigan Certification #: 9958
Minnesota Certification #: 047-999-395
Mississippi Certification #: TN00003
Missouri Certification #: 340
Montana Certification #: CERT0086
Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34
New Hampshire Certification #: 2975
New Jersey Certification #: TN002
New Mexico DW Certification
New York Certification #: 11742
North Carolina Aquatic Toxicity Certification #: 41
North Carolina Drinking Water Certification #: 21704
North Carolina Environmental Certificate #: 375
North Dakota Certification #: R-140
Ohio VAP Certification #: CL0069
Oklahoma Certification #: 9915
Oregon Certification #: TN200002
Pennsylvania Certification #: 68-02979
Rhode Island Certification #: LAO00356
South Carolina Certification #: 84004
South Dakota Certification
Tennessee DW/Chem/Micro Certification #: 2006
Texas Mold Certification #: LAB0152
Texas Certification #: T 104704245-17-14
USDA Soil Permit #: P330-15-00234
Utah Certification #: TN00003
Vermont Dept. of Health: ID# VT-2006
Virginia Certification #: VT2006
Virginia Certification #: 460132
Washington Certification #: C847
West Virginia Certification #: 233
Wisconsin Certification #: 998093910
Wyoming UST Certification #: via A2LA 2926.01
A2LA-ISO 17025 Certification #: 1461.01
A2LA-ISO 17025 Certification #: 1461.02
AIHA-LAP/LLC EMLAP Certification #:100789

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kinsey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706

North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006

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CERTIFICATIONS

Project: Sludge
Pace Project No.: 92741256

Pace Analytical Services Charlotte

South Carolina Certification #: 99006001	Kentucky UST Certification #: 84
South Carolina Drinking Water Cert. #: 99006003	Louisiana DoH Drinking Water #: LA029
Florida/NELAP Certification #: E87627	Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville

2225 Riverside Drive, Asheville, NC 28804	South Carolina Laboratory ID: 99030
Florida/NELAP Certification #: E87648	South Carolina Certification #: 99030001
North Carolina Drinking Water Certification #: 37712	Virginia/VELAP Certification #: 460222
North Carolina Wastewater Certification #: 40	

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092	North Carolina Certification #: 381
Florida DOH Certification #: E87315	South Carolina Certification #: 98011001
Georgia DW Inorganics Certification #: 812	Virginia Certification #: 460204

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SAMPLE ANALYTE COUNT

Project: Sludge
 Pace Project No.: 92741256

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92741256001	SS-1S	EPA 8151A	NWH	3	PAN
		EPA 8081B	SEM	9	PASI-C
		EPA 9056	KBB	1	PASI-I
		EPA 6010D	DRB	5	PASI-GA
		EPA 6010D	MJS2	7	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 6010	AF, ASB	6	PASI-O
		EPA 7471	JNK	1	PASI-O
		EPA 8270E	ICO	18	PASI-C
		EPA 8260D	LMB	70	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	CHC	1	PASI-C
		EPA 1010B	SMS	1	PASI-A
		EPA 9045D	YEG	1	PASI-A
		EPA 353.2 Rev 2.0 1993	MFO	3	PASI-A
		SM 4500-CI-E-2011	ZJP	1	PASI-A
		EPA 9014	CDD	1	PASI-PA
		SM 4500-S2-F-2011	CDD	1	PASI-PA
		92741256002	SS-1D	EPA 8081B	HCS
EPA 8151A	NWH			3	PAN
EPA 9056	KBB			1	PASI-I
EPA 6010D	AJM, DRB			5	PASI-GA
EPA 6010D	MJS2			7	PASI-GA
EPA 7470A	VB			1	PASI-GA
EPA 7471B	VB			1	PASI-GA
EPA 6010	AF, ASB			6	PASI-O
EPA 7471	JNK			1	PASI-O
EPA 8270E	ICO			18	PASI-C
EPA 8260D	LMB			70	PASI-C
EPA 8260D	SAS			14	PASI-C
SW-846	CHC			1	PASI-C
EPA 1010B	SMS			1	PASI-A
EPA 9045D	YEG			1	PASI-A
EPA 353.2 Rev 2.0 1993	MFO			3	PASI-A
SM 4500-CI-E-2011	ZJP			1	PASI-A
EPA 9014	CDD			1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Sludge
 Pace Project No.: 92741256

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92741256003	SS-2S	SM 4500-S2-F-2011	CDD	1	PASI-PA
		EPA 8081B	SEM	9	PASI-C
		EPA 9056	KBB	1	PASI-I
		EPA 6010D	AJM, DRB	5	PASI-GA
		EPA 6010D	MJS2	7	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 6010	AF, ASB	6	PASI-O
		EPA 7471	JNK	1	PASI-O
		EPA 8270E	ICO	18	PASI-C
		EPA 8260D	LMB	70	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	CHC	1	PASI-C
		EPA 1010B	SMS	1	PASI-A
		EPA 9045D	YEG	1	PASI-A
		EPA 353.2 Rev 2.0 1993	MFO	3	PASI-A
		SM 4500-CI-E-2011	ZJP	1	PASI-A
		EPA 9014	CDD	1	PASI-PA
		92741256004	SS-2D	SM 4500-S2-F-2011	CDD
EPA 8151A	NWH			3	PAN
EPA 8081B	SEM			9	PASI-C
EPA 9056	KBB			1	PASI-I
EPA 6010D	AJM, DRB			5	PASI-GA
EPA 6010D	MJS2			7	PASI-GA
EPA 7470A	VB			1	PASI-GA
EPA 7471B	VB			1	PASI-GA
EPA 6010	AF, ASB			6	PASI-O
EPA 7471	JNK			1	PASI-O
EPA 8270E	ICO			18	PASI-C
EPA 8260D	LMB			70	PASI-C
EPA 8260D	SAS			14	PASI-C
SW-846	CHC			1	PASI-C
EPA 1010B	SMS			1	PASI-A
EPA 9045D	YEG			1	PASI-A
EPA 353.2 Rev 2.0 1993	MFO			3	PASI-A
SM 4500-CI-E-2011	ZJP			1	PASI-A
EPA 9014	CDD			1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: Sludge
 Pace Project No.: 92741256

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92741256005	SS-3S	SM 4500-S2-F-2011	CDD	1	PASI-PA
		EPA 8151A	NWH	3	PAN
		EPA 8081B	SEM	9	PASI-C
		EPA 9056	KBB	1	PASI-I
		EPA 6010D	AJM, DRB	5	PASI-GA
		EPA 6010D	MJS2	7	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 6010	AF, ASB	6	PASI-O
		EPA 7471	JNK	1	PASI-O
		EPA 8270E	PKS	18	PASI-C
		EPA 8260D	LMB	70	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	CHC	1	PASI-C
		EPA 1010B	SMS	1	PASI-A
		EPA 9045D	YEG	1	PASI-A
		EPA 353.2 Rev 2.0 1993	MFO	3	PASI-A
		SM 4500-CI-E-2011	ZJP	1	PASI-A
		EPA 9014	CDD	1	PASI-PA
92741256006	SS-3D	SM 4500-S2-F-2011	CDD	1	PASI-PA
		EPA 8151A	NWH	3	PAN
		EPA 8081B	SEM	9	PASI-C
		EPA 9056	KBB	1	PASI-I
		EPA 6010D	DRB	5	PASI-GA
		EPA 6010D	MJS2	7	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 6010	ASB	6	PASI-O
		EPA 7471	JNK	1	PASI-O
		EPA 8270E	PKS	18	PASI-C
		EPA 8260D	LMB	70	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	CHC	1	PASI-C
		EPA 1010B	SMS	1	PASI-A
		EPA 9045D	YEG	1	PASI-A
		EPA 353.2 Rev 2.0 1993	MFO	3	PASI-A
		SM 4500-CI-E-2011	ZJP	1	PASI-A

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SAMPLE ANALYTE COUNT

Project: Sludge
 Pace Project No.: 92741256

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92741256007	SS-4S	EPA 9014	CDD	1	PASI-PA
		SM 4500-S2-F-2011	CDD	1	PASI-PA
		EPA 8081B	SEM	9	PASI-C
		EPA 9056	KBB	1	PASI-I
		EPA 6010D	AJM, DRB	5	PASI-GA
		EPA 6010D	MJS2	7	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 6010	ASB	6	PASI-O
		EPA 7471	JNK	1	PASI-O
		EPA 8270E	PKS	18	PASI-C
		EPA 8260D	LMB	70	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	CHC	1	PASI-C
		EPA 1010B	SMS	1	PASI-A
		EPA 9045D	YEG	1	PASI-A
		92741256008	SS-4D	EPA 353.2 Rev 2.0 1993	MFO
EPA 9014	CDD			1	PASI-PA
SM 4500-S2-F-2011	CDD			1	PASI-PA
EPA 8151A	NWH			3	PAN
EPA 8081B	SEM			9	PASI-C
EPA 9056	KBB			1	PASI-I
EPA 6010D	AJM, DRB			5	PASI-GA
EPA 6010D	MJS2			7	PASI-GA
EPA 7470A	VB			1	PASI-GA
EPA 7471B	VB			1	PASI-GA
EPA 6010	ASB			6	PASI-O
EPA 7471	JNK			1	PASI-O
EPA 8270E	ICO			18	PASI-C
EPA 8260D	LMB			70	PASI-C
EPA 8260D	SAS			14	PASI-C
SW-846	CHC			1	PASI-C
EPA 1010B	SMS			1	PASI-A
EPA 9045D	YEG	1	PASI-A		
EPA 353.2 Rev 2.0 1993	MFO	3	PASI-A		
SM 4500-CI-E-2011	ZJP	1	PASI-A		
EPA 9014	CDD	1	PASI-PA		

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SAMPLE ANALYTE COUNT

Project: Sludge
 Pace Project No.: 92741256

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92741256009	SS-5S	SM 4500-S2-F-2011	CDD	1	PASI-PA
		EPA 8081B	HCS	9	PAN
		EPA 8151A	NWH	3	PAN
		EPA 9056	KBB	1	PASI-I
		EPA 6010D	AJM, DRB	5	PASI-GA
		EPA 6010D	MJS2	7	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 6010	ASB	6	PASI-O
		EPA 7471	JNK	1	PASI-O
		EPA 8270E	ICO	18	PASI-C
		EPA 8260D	LMB	70	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	CHC	1	PASI-C
		EPA 1010B	SMS	1	PASI-A
		EPA 9045D	YEG	1	PASI-A
		EPA 353.2 Rev 2.0 1993	MFO	3	PASI-A
		SM 4500-CI-E-2011	ZJP	1	PASI-A
		EPA 9014	CDD	1	PASI-PA
92741256010	SS-5D	SM 4500-S2-F-2011	CDD	1	PASI-PA
		EPA 8151A	RDH	3	PAN
		EPA 8081B	SEM	9	PASI-C
		EPA 9056	KBB	1	PASI-I
		EPA 6010D	MJS2	5	PASI-GA
		EPA 6010D	MJS2	7	PASI-GA
		EPA 7470A	VB	1	PASI-GA
		EPA 7471B	VB	1	PASI-GA
		EPA 6010	ASB	6	PASI-O
		EPA 7471	JNK	1	PASI-O
		EPA 8270E	ICO	18	PASI-C
		EPA 8260D	LMB	70	PASI-C
		EPA 8260D	SAS	14	PASI-C
		SW-846	CHC	1	PASI-C
		EPA 1010B	SMS	1	PASI-A
		EPA 9045D	YEG	1	PASI-A
		EPA 353.2 Rev 2.0 1993	MFO	3	PASI-A
		SM 4500-CI-E-2011	ZJP	1	PASI-A

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SAMPLE ANALYTE COUNT

Project: Sludge
Pace Project No.: 92741256

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9014	CDD	1	PASI-PA
		SM 4500-S2-F-2011	CDD	1	PASI-PA

PAN = Pace National - Mt. Juliet

PASI-A = Pace Analytical Services - Asheville

PASI-C = Pace Analytical Services - Charlotte

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

PASI-I = Pace Analytical Services - Indianapolis

PASI-O = Pace Analytical Services - Ormond Beach

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-1S **Lab ID: 92741256001** Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Leachate Method/Date: 1311; 08/01/24 10:38 Initial pH: 9.27; Final pH: 6.85								
Pace National - Mt. Juliet								
2,4,5-TP (Silvex)	ND	mg/L	0.00200	1	08/03/24 15:43	08/03/24 23:18	93-72-1	H3
2,4-D	ND	mg/L	0.00200	1	08/03/24 15:43	08/03/24 23:18	94-75-7	H3,P9
Surrogates								
2,4-DCAA (S)	112	%	14.0-158	1	08/03/24 15:43	08/03/24 23:18	19719-28-9	
8081 TCLP Pesticides RVE								
Analytical Method: EPA 8081B Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/25/24 15:00 Initial pH: 4.45; Final pH: 5								
Pace Analytical Services - Charlotte								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:32	58-89-9	H2
Chlordane (Technical)	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 11:32	57-74-9	H2
Endrin	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:32	72-20-8	H2
Heptachlor	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:32	76-44-8	H2
Heptachlor epoxide	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:32	1024-57-3	H2
Methoxychlor	ND	ug/L	1000	1	07/26/24 15:39	07/29/24 11:32	72-43-5	H2
Toxaphene	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 11:32	8001-35-2	H2
Surrogates								
Decachlorobiphenyl (S)	121	%	19-200	1	07/26/24 15:39	07/29/24 11:32	2051-24-3	
Tetrachloro-m-xylene (S)	107	%	10-137	1	07/26/24 15:39	07/29/24 11:32	877-09-8	
9056 IC Anions								
Analytical Method: EPA 9056 Preparation Method: EPA 9056								
Pace Analytical Services - Indianapolis								
Sulfate	70.8	mg/kg	7.9	1	07/27/24 15:30	07/29/24 14:45	14808-79-8	N2
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Calcium	105000	mg/kg	786	10	07/12/24 15:07	07/17/24 12:59	7440-70-2	
Cobalt	62.6	mg/kg	3.1	1	07/12/24 15:07	07/16/24 17:05	7440-48-4	
Manganese	30500	mg/kg	31.4	10	07/12/24 15:07	07/17/24 12:59	7439-96-5	E
Sodium	1850	mg/kg	786	10	07/12/24 15:07	07/17/24 12:59	7440-23-5	
Zinc	61700	mg/kg	23.6	10	07/12/24 15:07	07/17/24 12:59	7440-66-6	E
6010D ATL ICP, TCLP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 8.41; Final pH: 5.11								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.30	1	07/19/24 17:49	07/20/24 19:50	7440-38-2	
Barium	ND	mg/L	0.50	1	07/19/24 17:49	07/20/24 19:50	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:50	7440-43-9	
Chromium	0.16	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:50	7440-47-3	
Lead	ND	mg/L	0.25	1	07/19/24 17:49	07/20/24 19:50	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/19/24 17:49	07/20/24 19:50	7782-49-2	
Silver	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:50	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-1S Lab ID: 92741256001 Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 8.41; Final pH: 5.11								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.0050	1	07/19/24 08:30	07/19/24 11:06	7439-97-6	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.78	1	07/18/24 16:30	07/19/24 13:34	7439-97-6	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	77000	mg/kg	311	2	07/18/24 08:39	07/20/24 01:09	7440-70-2	
Cobalt	67.7	mg/kg	1.6	1	07/18/24 08:39	07/18/24 21:38	7440-48-4	
Magnesium	107000	mg/kg	779	10	07/18/24 08:39	07/20/24 01:13	7439-95-4	
Manganese	41400	mg/kg	389	500	07/18/24 08:39	07/22/24 14:26	7439-96-5	
Sodium	1730	mg/kg	156	1	07/18/24 08:39	07/18/24 21:38	7440-23-5	
Zinc	77200	mg/kg	3110	200	07/18/24 08:39	07/20/24 01:20	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.27	mg/kg	0.025	1	07/17/24 09:38	07/17/24 15:31	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/16/24 13:00 Initial pH: 5.84; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/18/24 22:32	07/19/24 20:31	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 20:31	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	15	%	10-133	1	07/18/24 22:32	07/19/24 20:31	4165-60-0	
2-Fluorobiphenyl (S)	10	%	10-130	1	07/18/24 22:32	07/19/24 20:31	321-60-8	
Terphenyl-d14 (S)	40	%	10-193	1	07/18/24 22:32	07/19/24 20:31	1718-51-0	
Phenol-d6 (S)	14	%	10-130	1	07/18/24 22:32	07/19/24 20:31	13127-88-3	
2-Fluorophenol (S)	15	%	10-130	1	07/18/24 22:32	07/19/24 20:31	367-12-4	
2,4,6-Tribromophenol (S)	34	%	10-166	1	07/18/24 22:32	07/19/24 20:31	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-1S Lab ID: 92741256001 Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Acetone	ND	ug/kg	899	1	07/13/24 16:14	07/14/24 09:58	67-64-1	
Benzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	71-43-2	
Bromobenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	108-86-1	
Bromochloromethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	74-97-5	
Bromodichloromethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	75-27-4	
Bromoform	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	75-25-2	
Bromomethane	ND	ug/kg	180	1	07/13/24 16:14	07/14/24 09:58	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	899	1	07/13/24 16:14	07/14/24 09:58	78-93-3	
n-Butylbenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	104-51-8	
sec-Butylbenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	135-98-8	
tert-Butylbenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	98-06-6	
Carbon tetrachloride	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	56-23-5	
Chlorobenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	108-90-7	
Chloroethane	ND	ug/kg	89.9	1	07/13/24 16:14	07/14/24 09:58	75-00-3	
Chloroform	116	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	67-66-3	
Chloromethane	ND	ug/kg	89.9	1	07/13/24 16:14	07/14/24 09:58	74-87-3	
2-Chlorotoluene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	95-49-8	
4-Chlorotoluene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	96-12-8	
Dibromochloromethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	106-93-4	
Dibromomethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	541-73-1	
1,4-Dichlorobenzene	147	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	89.9	1	07/13/24 16:14	07/14/24 09:58	75-71-8	
1,1-Dichloroethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	75-34-3	
1,2-Dichloroethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	107-06-2	
1,1-Dichloroethene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	156-60-5	
1,2-Dichloropropane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	78-87-5	
1,3-Dichloropropane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	142-28-9	
2,2-Dichloropropane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	10061-02-6	
Diisopropyl ether	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	108-20-3	
Ethylbenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	89.9	1	07/13/24 16:14	07/14/24 09:58	87-68-3	
2-Hexanone	ND	ug/kg	449	1	07/13/24 16:14	07/14/24 09:58	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	98-82-8	
p-Isopropyltoluene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	99-87-6	
Methylene Chloride	ND	ug/kg	180	1	07/13/24 16:14	07/14/24 09:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	449	1	07/13/24 16:14	07/14/24 09:58	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-1S Lab ID: 92741256001 Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Methyl-tert-butyl ether	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	1634-04-4	
Naphthalene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	91-20-3	
n-Propylbenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	103-65-1	
Styrene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	79-34-5	
Tetrachloroethene	111	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	127-18-4	
Toluene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	79-00-5	
Trichloroethene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	79-01-6	
Trichlorofluoromethane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	108-67-8	
Vinyl acetate	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	108-05-4	
Vinyl chloride	ND	ug/kg	89.9	1	07/13/24 16:14	07/14/24 09:58	75-01-4	
Xylene (Total)	ND	ug/kg	89.9	1	07/13/24 16:14	07/14/24 09:58	1330-20-7	
m&p-Xylene	ND	ug/kg	89.9	1	07/13/24 16:14	07/14/24 09:58	179601-23-1	
o-Xylene	ND	ug/kg	44.9	1	07/13/24 16:14	07/14/24 09:58	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1	07/13/24 16:14	07/14/24 09:58	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1	07/13/24 16:14	07/14/24 09:58	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	70-130	1	07/13/24 16:14	07/14/24 09:58	17060-07-0	

8260D MSV TCLP

Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/17/24 14:06

Pace Analytical Services - Charlotte

Benzene	ND	ug/L	100	20		07/18/24 15:07	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/18/24 15:07	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/18/24 15:07	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/18/24 15:07	108-90-7	
Chloroform	ND	ug/L	100	20		07/18/24 15:07	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/18/24 15:07	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/18/24 15:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/18/24 15:07	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/18/24 15:07	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/18/24 15:07	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/18/24 15:07	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%	70-130	20		07/18/24 15:07	17060-07-0	
Toluene-d8 (S)	103	%	70-130	20		07/18/24 15:07	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	20		07/18/24 15:07	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-1S **Lab ID: 92741256001** Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: SW-846 Pace Analytical Services - Charlotte								
Percent Moisture	68.8	%	0.10	1		07/11/24 16:33		N2
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010B Pace Analytical Services - Asheville								
Flashpoint	>200	deg F	70.0	1		07/23/24 10:19		
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	8.8	Std. Units	0.10	1		07/17/24 12:30		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	4010	mg/kg	1260	100	07/17/24 00:02	07/17/24 05:48		H1,H2
Nitrogen, Nitrate	4010	mg/kg	1260	100	07/17/24 00:02	07/17/24 05:48	14797-55-8	
Nitrogen, Nitrite	ND	mg/kg	12.6	1	07/17/24 00:02	07/17/24 04:40	14797-65-0	H1,H2
4500 Chloride in Soil								
Analytical Method: SM 4500-Cl-E-2011 Preparation Method: SM 4500-Cl-E-2011 Pace Analytical Services - Asheville								
Chloride	547	mg/kg	32.1	1	07/19/24 12:15	07/22/24 11:42	16887-00-6	M1
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	3.2	1	07/15/24 20:05	07/17/24 14:41		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	31.9	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-1D Lab ID: 92741256002 Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Pesticides (GC) 8081B TCLP								
Analytical Method: EPA 8081B Preparation Method: 3510C								
Leachate Method/Date: 1311; 08/14/24 12:46 Initial pH: 9.05; Final pH: 5.95								
Pace National - Mt. Juliet								
Chlordane (Technical)	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:37	57-74-9	
Endrin	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:37	72-20-8	
gamma-BHC (Lindane)	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:37	58-89-9	
Heptachlor	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:37	76-44-8	
Heptachlor epoxide	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:37	1024-57-3	
Methoxychlor	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:37	72-43-5	
Toxaphene	ND	mg/L	0.0100	1	08/16/24 07:37	08/16/24 15:37	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	85.4	%	10.0-128	1	08/16/24 07:37	08/16/24 15:37	2051-24-3	
Tetrachloro-m-xylene (S)	94.7	%	10.0-127	1	08/16/24 07:37	08/16/24 15:37	877-09-8	
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Leachate Method/Date: 1311; 08/01/24 10:38 Initial pH: 9.23; Final pH: 6.37								
Pace National - Mt. Juliet								
2,4,5-TP (Silvex)	ND	mg/L	0.00200	1	08/03/24 15:43	08/03/24 23:28	93-72-1	H3
2,4-D	ND	mg/L	0.00200	1	08/03/24 15:43	08/03/24 23:28	94-75-7	H3
Surrogates								
2,4-DCAA (S)	115	%	14.0-158	1	08/03/24 15:43	08/03/24 23:28	19719-28-9	
9056 IC Anions								
Analytical Method: EPA 9056 Preparation Method: EPA 9056								
Pace Analytical Services - Indianapolis								
Sulfate	84.4	mg/kg	7.6	1	07/27/24 15:30	07/29/24 15:19	14808-79-8	N2
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Calcium	36600	mg/kg	754	10	07/12/24 15:07	07/17/24 20:09	7440-70-2	
Cobalt	14.4	mg/kg	3.0	1	07/12/24 15:07	07/16/24 17:45	7440-48-4	
Manganese	9380	mg/kg	30.2	10	07/12/24 15:07	07/17/24 20:09	7439-96-5	
Sodium	1230	mg/kg	754	10	07/12/24 15:07	07/17/24 20:09	7440-23-5	
Zinc	26100	mg/kg	22.6	10	07/12/24 15:07	07/17/24 20:09	7440-66-6	
6010D ATL ICP, TCLP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.65; Final pH: 5.87								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.30	1	07/19/24 17:49	07/20/24 19:54	7440-38-2	
Barium	ND	mg/L	0.50	1	07/19/24 17:49	07/20/24 19:54	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:54	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:54	7440-47-3	
Lead	ND	mg/L	0.25	1	07/19/24 17:49	07/20/24 19:54	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/19/24 17:49	07/20/24 19:54	7782-49-2	
Silver	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:54	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-1D Lab ID: 92741256002 Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.65; Final pH: 5.87								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.0050	1	07/19/24 08:30	07/19/24 11:21	7439-97-6	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.67	1	07/18/24 16:30	07/19/24 13:36	7439-97-6	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	72600	mg/kg	164	1	07/18/24 08:39	07/18/24 22:02	7440-70-2	
Cobalt	24.2	mg/kg	1.6	1	07/18/24 08:39	07/18/24 22:02	7440-48-4	
Magnesium	81600	mg/kg	822	10	07/18/24 08:39	07/20/24 01:24	7439-95-4	
Manganese	31500	mg/kg	164	200	07/18/24 08:39	07/22/24 14:29	7439-96-5	
Sodium	2260	mg/kg	164	1	07/18/24 08:39	07/18/24 22:02	7440-23-5	
Zinc	67300	mg/kg	3290	200	07/18/24 08:39	07/22/24 14:29	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.17	mg/kg	0.022	1	07/17/24 09:38	07/17/24 15:34	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/16/24 13:00 Initial pH: 6.19; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/17/24 17:27	07/18/24 15:58	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/17/24 17:27	07/18/24 15:58	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	24	%	10-133	1	07/17/24 17:27	07/18/24 15:58	4165-60-0	
2-Fluorobiphenyl (S)	23	%	10-130	1	07/17/24 17:27	07/18/24 15:58	321-60-8	
Terphenyl-d14 (S)	49	%	10-193	1	07/17/24 17:27	07/18/24 15:58	1718-51-0	
Phenol-d6 (S)	16	%	10-130	1	07/17/24 17:27	07/18/24 15:58	13127-88-3	
2-Fluorophenol (S)	16	%	10-130	1	07/17/24 17:27	07/18/24 15:58	367-12-4	
2,4,6-Tribromophenol (S)	41	%	10-166	1	07/17/24 17:27	07/18/24 15:58	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-1D Lab ID: 92741256002 Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Acetone	ND	ug/kg	692	1	07/13/24 16:14	07/14/24 10:15	67-64-1	
Benzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	71-43-2	
Bromobenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	108-86-1	
Bromochloromethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	74-97-5	
Bromodichloromethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	75-27-4	
Bromoform	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	75-25-2	
Bromomethane	ND	ug/kg	138	1	07/13/24 16:14	07/14/24 10:15	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	692	1	07/13/24 16:14	07/14/24 10:15	78-93-3	
n-Butylbenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	104-51-8	
sec-Butylbenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	135-98-8	
tert-Butylbenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	98-06-6	
Carbon tetrachloride	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	56-23-5	
Chlorobenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	108-90-7	
Chloroethane	ND	ug/kg	69.2	1	07/13/24 16:14	07/14/24 10:15	75-00-3	
Chloroform	199	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	67-66-3	
Chloromethane	ND	ug/kg	69.2	1	07/13/24 16:14	07/14/24 10:15	74-87-3	
2-Chlorotoluene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	95-49-8	
4-Chlorotoluene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	96-12-8	
Dibromochloromethane	47.1	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	106-93-4	
Dibromomethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	541-73-1	
1,4-Dichlorobenzene	85.1	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	69.2	1	07/13/24 16:14	07/14/24 10:15	75-71-8	
1,1-Dichloroethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	75-34-3	
1,2-Dichloroethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	107-06-2	
1,1-Dichloroethene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	156-60-5	
1,2-Dichloropropane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	78-87-5	
1,3-Dichloropropane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	142-28-9	
2,2-Dichloropropane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	10061-02-6	
Diisopropyl ether	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	108-20-3	
Ethylbenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	69.2	1	07/13/24 16:14	07/14/24 10:15	87-68-3	
2-Hexanone	ND	ug/kg	346	1	07/13/24 16:14	07/14/24 10:15	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	98-82-8	
p-Isopropyltoluene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	99-87-6	
Methylene Chloride	ND	ug/kg	138	1	07/13/24 16:14	07/14/24 10:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	346	1	07/13/24 16:14	07/14/24 10:15	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-1D Lab ID: 92741256002 Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Methyl-tert-butyl ether	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	1634-04-4	
Naphthalene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	91-20-3	
n-Propylbenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	103-65-1	
Styrene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	79-34-5	
Tetrachloroethene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	127-18-4	
Toluene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	79-00-5	
Trichloroethene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	79-01-6	
Trichlorofluoromethane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	108-67-8	
Vinyl acetate	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	108-05-4	
Vinyl chloride	ND	ug/kg	69.2	1	07/13/24 16:14	07/14/24 10:15	75-01-4	
Xylene (Total)	ND	ug/kg	69.2	1	07/13/24 16:14	07/14/24 10:15	1330-20-7	
m&p-Xylene	ND	ug/kg	69.2	1	07/13/24 16:14	07/14/24 10:15	179601-23-1	
o-Xylene	ND	ug/kg	34.6	1	07/13/24 16:14	07/14/24 10:15	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1	07/13/24 16:14	07/14/24 10:15	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1	07/13/24 16:14	07/14/24 10:15	460-00-4	
1,2-Dichloroethane-d4 (S)	90	%	70-130	1	07/13/24 16:14	07/14/24 10:15	17060-07-0	

8260D MSV TCLP

Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/17/24 14:06

Pace Analytical Services - Charlotte

Benzene	ND	ug/L	100	20		07/18/24 15:25	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/18/24 15:25	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/18/24 15:25	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/18/24 15:25	108-90-7	
Chloroform	ND	ug/L	100	20		07/18/24 15:25	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/18/24 15:25	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/18/24 15:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/18/24 15:25	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/18/24 15:25	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/18/24 15:25	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/18/24 15:25	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%	70-130	20		07/18/24 15:25	17060-07-0	
Toluene-d8 (S)	105	%	70-130	20		07/18/24 15:25	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	20		07/18/24 15:25	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-1D **Lab ID: 92741256002** Collected: 07/10/24 10:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: SW-846 Pace Analytical Services - Charlotte								
Percent Moisture	67.7	%	0.10	1		07/11/24 16:33		N2
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010B Pace Analytical Services - Asheville								
Flashpoint	>200	deg F	70.0	1		07/23/24 11:17		
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	8.8	Std. Units	0.10	1		07/17/24 12:34		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	5660	mg/kg	1220	100	07/17/24 00:02	07/17/24 05:50		H1,H2, M1
Nitrogen, Nitrate	5660	mg/kg	1220	100	07/17/24 00:02	07/17/24 05:50	14797-55-8	
Nitrogen, Nitrite	ND	mg/kg	12.2	1	07/17/24 00:02	07/17/24 04:41	14797-65-0	H1,H2, M1
4500 Chloride in Soil								
Analytical Method: SM 4500-CI-E-2011 Preparation Method: SM 4500-CI-E-2011 Pace Analytical Services - Asheville								
Chloride	1200	mg/kg	30.9	1	07/19/24 12:15	07/22/24 11:45	16887-00-6	
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	3.1	1	07/15/24 20:05	07/17/24 14:42		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	30.9	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-2S Lab ID: 92741256003 Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8081 TCLP Pesticides RVE

Analytical Method: EPA 8081B Preparation Method: EPA 3510C
Leachate Method/Date: EPA 1311; 07/25/24 15:00 Initial pH: 4.28; Final pH: 5
Pace Analytical Services - Charlotte

gamma-BHC (Lindane)	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:46	58-89-9	H2
Chlordane (Technical)	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 11:46	57-74-9	H2
Endrin	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:46	72-20-8	H2
Heptachlor	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:46	76-44-8	H2
Heptachlor epoxide	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:46	1024-57-3	H2
Methoxychlor	ND	ug/L	1000	1	07/26/24 15:39	07/29/24 11:46	72-43-5	H2
Toxaphene	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 11:46	8001-35-2	H2

Surrogates

Decachlorobiphenyl (S)	109	%	19-200	1	07/26/24 15:39	07/29/24 11:46	2051-24-3	
Tetrachloro-m-xylene (S)	95	%	10-137	1	07/26/24 15:39	07/29/24 11:46	877-09-8	

9056 IC Anions

Analytical Method: EPA 9056 Preparation Method: EPA 9056
Pace Analytical Services - Indianapolis

Sulfate	46.4	mg/kg	9.0	1	07/27/24 15:30	07/29/24 15:54	14808-79-8	N2
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6010D ATL ICP

Analytical Method: EPA 6010D Preparation Method: EPA 3050B
Pace Analytical Services - Peachtree Corners, GA

Calcium	106000	mg/kg	898	10	07/12/24 15:07	07/17/24 14:22	7440-70-2	
Cobalt	22.3	mg/kg	3.6	1	07/12/24 15:07	07/16/24 17:50	7440-48-4	
Manganese	33400	mg/kg	35.9	10	07/12/24 15:07	07/17/24 14:22	7439-96-5	
Sodium	1240	mg/kg	898	10	07/12/24 15:07	07/17/24 14:22	7440-23-5	
Zinc	79000	mg/kg	135	50	07/12/24 15:07	07/17/24 15:32	7440-66-6	

6010D ATL ICP, TCLP

Analytical Method: EPA 6010D Preparation Method: EPA 3010A
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.58; Final pH: 5.69
Pace Analytical Services - Peachtree Corners, GA

Arsenic	ND	mg/L	0.30	1	07/19/24 17:49	07/20/24 19:58	7440-38-2	
Barium	ND	mg/L	0.50	1	07/19/24 17:49	07/20/24 19:58	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:58	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:58	7440-47-3	
Lead	ND	mg/L	0.25	1	07/19/24 17:49	07/20/24 19:58	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/19/24 17:49	07/20/24 19:58	7782-49-2	
Silver	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 19:58	7440-22-4	

7470 Mercury, TCLP

Analytical Method: EPA 7470A Preparation Method: EPA 7470A
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.58; Final pH: 5.69
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.0050	1	07/19/24 08:30	07/19/24 11:24	7439-97-6	
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7471 Mercury

Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/kg	0.85	1	07/18/24 16:30	07/19/24 13:39	7439-97-6	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-2S Lab ID: 92741256003 Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	78500	mg/kg	175	1	07/18/24 08:39	07/18/24 22:06	7440-70-2	
Cobalt	23.4	mg/kg	1.8	1	07/18/24 08:39	07/18/24 22:06	7440-48-4	
Magnesium	146000	mg/kg	4380	50	07/18/24 08:39	07/20/24 01:34	7439-95-4	
Manganese	49300	mg/kg	438	500	07/18/24 08:39	07/22/24 14:36	7439-96-5	
Sodium	1350	mg/kg	175	1	07/18/24 08:39	07/18/24 22:06	7440-23-5	
Zinc	82900	mg/kg	3500	200	07/18/24 08:39	07/20/24 01:42	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.17	mg/kg	0.032	1	07/17/24 09:38	07/17/24 15:36	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/16/24 13:00 Initial pH: 5.18; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/19/24 10:40	07/19/24 16:02	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:02	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	90	%	10-133	1	07/19/24 10:40	07/19/24 16:02	4165-60-0	
2-Fluorobiphenyl (S)	77	%	10-130	1	07/19/24 10:40	07/19/24 16:02	321-60-8	
Terphenyl-d14 (S)	102	%	10-193	1	07/19/24 10:40	07/19/24 16:02	1718-51-0	
Phenol-d6 (S)	37	%	10-130	1	07/19/24 10:40	07/19/24 16:02	13127-88-3	
2-Fluorophenol (S)	27	%	10-130	1	07/19/24 10:40	07/19/24 16:02	367-12-4	
2,4,6-Tribromophenol (S)	38	%	10-166	1	07/19/24 10:40	07/19/24 16:02	118-79-6	
8260D/5035A/5030B Volatiles								
Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B								
Pace Analytical Services - Charlotte								
Acetone	ND	ug/kg	727	1	07/13/24 16:14	07/14/24 10:33	67-64-1	
Benzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	71-43-2	
Bromobenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	108-86-1	
Bromochloromethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	74-97-5	
Bromodichloromethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	75-27-4	
Bromoform	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	75-25-2	
Bromomethane	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 10:33	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	727	1	07/13/24 16:14	07/14/24 10:33	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-2S Lab ID: 92741256003 Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
n-Butylbenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	104-51-8	
sec-Butylbenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	135-98-8	
tert-Butylbenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	98-06-6	
Carbon tetrachloride	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	56-23-5	
Chlorobenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	108-90-7	
Chloroethane	ND	ug/kg	72.7	1	07/13/24 16:14	07/14/24 10:33	75-00-3	
Chloroform	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	67-66-3	
Chloromethane	ND	ug/kg	72.7	1	07/13/24 16:14	07/14/24 10:33	74-87-3	
2-Chlorotoluene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	95-49-8	
4-Chlorotoluene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	96-12-8	
Dibromochloromethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	106-93-4	
Dibromomethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	72.7	1	07/13/24 16:14	07/14/24 10:33	75-71-8	
1,1-Dichloroethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	75-34-3	
1,2-Dichloroethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	107-06-2	
1,1-Dichloroethene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	156-60-5	
1,2-Dichloropropane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	78-87-5	
1,3-Dichloropropane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	142-28-9	
2,2-Dichloropropane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	10061-02-6	
Diisopropyl ether	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	108-20-3	
Ethylbenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	72.7	1	07/13/24 16:14	07/14/24 10:33	87-68-3	
2-Hexanone	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	98-82-8	
p-Isopropyltoluene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	99-87-6	
Methylene Chloride	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 10:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	1634-04-4	
Naphthalene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	91-20-3	
n-Propylbenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	103-65-1	
Styrene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	79-34-5	
Tetrachloroethene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	127-18-4	
Toluene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	108-88-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-2S Lab ID: 92741256003 Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
1,2,3-Trichlorobenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	79-00-5	
Trichloroethene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	79-01-6	
Trichlorofluoromethane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	108-67-8	
Vinyl acetate	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	108-05-4	
Vinyl chloride	ND	ug/kg	72.7	1	07/13/24 16:14	07/14/24 10:33	75-01-4	
Xylene (Total)	ND	ug/kg	72.7	1	07/13/24 16:14	07/14/24 10:33	1330-20-7	
m&p-Xylene	ND	ug/kg	72.7	1	07/13/24 16:14	07/14/24 10:33	179601-23-1	
o-Xylene	ND	ug/kg	36.4	1	07/13/24 16:14	07/14/24 10:33	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	70-130	1	07/13/24 16:14	07/14/24 10:33	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1	07/13/24 16:14	07/14/24 10:33	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	70-130	1	07/13/24 16:14	07/14/24 10:33	17060-07-0	
8260D MSV TCLP		Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/17/24 14:06 Pace Analytical Services - Charlotte						
Benzene	ND	ug/L	100	20		07/18/24 15:43	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/18/24 15:43	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/18/24 15:43	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/18/24 15:43	108-90-7	
Chloroform	ND	ug/L	100	20		07/18/24 15:43	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/18/24 15:43	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/18/24 15:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/18/24 15:43	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/18/24 15:43	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/18/24 15:43	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/18/24 15:43	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	20		07/18/24 15:43	17060-07-0	
Toluene-d8 (S)	104	%	70-130	20		07/18/24 15:43	2037-26-5	
4-Bromofluorobenzene (S)	105	%	70-130	20		07/18/24 15:43	460-00-4	
Percent Moisture		Analytical Method: SW-846 Pace Analytical Services - Charlotte						
Percent Moisture	72.3	%	0.10	1		07/11/24 16:33		N2
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010B Pace Analytical Services - Asheville						
Flashpoint	>200	deg F	70.0	1		07/23/24 11:54		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-2S **Lab ID: 92741256003** Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	9.2	Std. Units	0.10	1		07/17/24 12:37		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	4940	mg/kg	1420	100	07/17/24 00:02	07/17/24 05:56		H1,H2
Nitrogen, Nitrate	4900	mg/kg	1420	100	07/17/24 00:02	07/17/24 05:56	14797-55-8	
Nitrogen, Nitrite	46.1	mg/kg	14.2	1	07/17/24 00:02	07/17/24 04:45	14797-65-0	H1,H2
4500 Chloride in Soil								
Analytical Method: SM 4500-Cl-E-2011 Preparation Method: SM 4500-Cl-E-2011 Pace Analytical Services - Asheville								
Chloride	570	mg/kg	36.0	1	07/19/24 12:15	07/22/24 11:49	16887-00-6	
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	3.6	1	07/15/24 20:05	07/17/24 14:42		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	35.9	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-2D Lab ID: 92741256004 Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Leachate Method/Date: 1311; 08/01/24 10:38 Initial pH: 9.33; Final pH: 7.07								
Pace National - Mt. Juliet								
2,4,5-TP (Silvex)	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 17:29	93-72-1	H3
2,4-D	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 17:29	94-75-7	H3
Surrogates								
2,4-DCAA (S)	78.6	%	14.0-158	1	08/04/24 16:54	08/05/24 17:29	19719-28-9	
8081 TCLP Pesticides RVE								
Analytical Method: EPA 8081B Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/25/24 15:00 Initial pH: 4.52; Final pH: 5								
Pace Analytical Services - Charlotte								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:59	58-89-9	H2
Chlordane (Technical)	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 11:59	57-74-9	H2
Endrin	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:59	72-20-8	H2
Heptachlor	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:59	76-44-8	H2
Heptachlor epoxide	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 11:59	1024-57-3	H2
Methoxychlor	ND	ug/L	1000	1	07/26/24 15:39	07/29/24 11:59	72-43-5	H2
Toxaphene	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 11:59	8001-35-2	H2
Surrogates								
Decachlorobiphenyl (S)	113	%	19-200	1	07/26/24 15:39	07/29/24 11:59	2051-24-3	
Tetrachloro-m-xylene (S)	99	%	10-137	1	07/26/24 15:39	07/29/24 11:59	877-09-8	
9056 IC Anions								
Analytical Method: EPA 9056 Preparation Method: EPA 9056								
Pace Analytical Services - Indianapolis								
Sulfate	87.4	mg/kg	7.0	1	07/27/24 15:30	07/29/24 17:04	14808-79-8	N2
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Calcium	47800	mg/kg	725	10	07/12/24 15:07	07/17/24 14:27	7440-70-2	
Cobalt	9.5	mg/kg	2.9	1	07/12/24 15:07	07/16/24 17:55	7440-48-4	
Manganese	12700	mg/kg	29.0	10	07/12/24 15:07	07/17/24 14:27	7439-96-5	
Sodium	1530	mg/kg	725	10	07/12/24 15:07	07/17/24 14:27	7440-23-5	
Zinc	40000	mg/kg	109	50	07/12/24 15:07	07/17/24 15:37	7440-66-6	
6010D ATL ICP, TCLP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.06; Final pH: 5.21								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.30	1	07/19/24 17:49	07/20/24 20:02	7440-38-2	
Barium	ND	mg/L	0.50	1	07/19/24 17:49	07/20/24 20:02	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:02	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:02	7440-47-3	
Lead	ND	mg/L	0.25	1	07/19/24 17:49	07/20/24 20:02	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/19/24 17:49	07/20/24 20:02	7782-49-2	
Silver	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:02	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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**ANALYTICAL RESULTS**

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-2D **Lab ID: 92741256004** Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.06; Final pH: 5.21								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.0050	1	07/19/24 08:30	07/19/24 11:27	7439-97-6	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.67	1	07/18/24 16:30	07/19/24 13:47	7439-97-6	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	52000	mg/kg	145	1	07/18/24 08:39	07/18/24 22:09	7440-70-2	
Cobalt	11.2	mg/kg	1.4	1	07/18/24 08:39	07/18/24 22:09	7440-48-4	
Magnesium	109000	mg/kg	3620	50	07/18/24 08:39	07/20/24 01:53	7439-95-4	
Manganese	13900	mg/kg	72.3	100	07/18/24 08:39	07/20/24 01:56	7439-96-5	
Sodium	1540	mg/kg	145	1	07/18/24 08:39	07/18/24 22:09	7440-23-5	
Zinc	47000	mg/kg	1450	100	07/18/24 08:39	07/20/24 01:56	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.14	mg/kg	0.022	1	07/17/24 09:38	07/17/24 15:38	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/16/24 13:00 Initial pH: 6.1; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/19/24 10:40	07/19/24 16:28	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 10:40	07/19/24 16:28	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	90	%	10-133	1	07/19/24 10:40	07/19/24 16:28	4165-60-0	
2-Fluorobiphenyl (S)	80	%	10-130	1	07/19/24 10:40	07/19/24 16:28	321-60-8	
Terphenyl-d14 (S)	95	%	10-193	1	07/19/24 10:40	07/19/24 16:28	1718-51-0	
Phenol-d6 (S)	23	%	10-130	1	07/19/24 10:40	07/19/24 16:28	13127-88-3	
2-Fluorophenol (S)	16	%	10-130	1	07/19/24 10:40	07/19/24 16:28	367-12-4	
2,4,6-Tribromophenol (S)	27	%	10-166	1	07/19/24 10:40	07/19/24 16:28	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-2D Lab ID: 92741256004 Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Acetone	ND	ug/kg	630	1	07/13/24 16:14	07/14/24 10:50	67-64-1	
Benzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	71-43-2	
Bromobenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	108-86-1	
Bromochloromethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	74-97-5	
Bromodichloromethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	75-27-4	
Bromoform	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	75-25-2	
Bromomethane	ND	ug/kg	126	1	07/13/24 16:14	07/14/24 10:50	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	630	1	07/13/24 16:14	07/14/24 10:50	78-93-3	
n-Butylbenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	104-51-8	
sec-Butylbenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	135-98-8	
tert-Butylbenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	98-06-6	
Carbon tetrachloride	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	56-23-5	
Chlorobenzene	37.7	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	108-90-7	
Chloroethane	ND	ug/kg	63.0	1	07/13/24 16:14	07/14/24 10:50	75-00-3	
Chloroform	40.1	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	67-66-3	
Chloromethane	ND	ug/kg	63.0	1	07/13/24 16:14	07/14/24 10:50	74-87-3	
2-Chlorotoluene	36.9	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	95-49-8	
4-Chlorotoluene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	96-12-8	
Dibromochloromethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	106-93-4	
Dibromomethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	541-73-1	
1,4-Dichlorobenzene	33.7	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	63.0	1	07/13/24 16:14	07/14/24 10:50	75-71-8	
1,1-Dichloroethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	75-34-3	
1,2-Dichloroethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	107-06-2	
1,1-Dichloroethene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	156-60-5	
1,2-Dichloropropane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	78-87-5	
1,3-Dichloropropane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	142-28-9	
2,2-Dichloropropane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	10061-02-6	
Diisopropyl ether	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	108-20-3	
Ethylbenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	63.0	1	07/13/24 16:14	07/14/24 10:50	87-68-3	
2-Hexanone	ND	ug/kg	315	1	07/13/24 16:14	07/14/24 10:50	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	98-82-8	
p-Isopropyltoluene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	99-87-6	
Methylene Chloride	ND	ug/kg	126	1	07/13/24 16:14	07/14/24 10:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	315	1	07/13/24 16:14	07/14/24 10:50	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-2D Lab ID: 92741256004 Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles								
Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B								
Pace Analytical Services - Charlotte								
Methyl-tert-butyl ether	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	1634-04-4	
Naphthalene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	91-20-3	
n-Propylbenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	103-65-1	
Styrene	35.1	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	79-34-5	
Tetrachloroethene	235	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	127-18-4	
Toluene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	79-00-5	
Trichloroethene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	79-01-6	
Trichlorofluoromethane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	108-67-8	
Vinyl acetate	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	108-05-4	
Vinyl chloride	ND	ug/kg	63.0	1	07/13/24 16:14	07/14/24 10:50	75-01-4	
Xylene (Total)	ND	ug/kg	63.0	1	07/13/24 16:14	07/14/24 10:50	1330-20-7	
m&p-Xylene	ND	ug/kg	63.0	1	07/13/24 16:14	07/14/24 10:50	179601-23-1	
o-Xylene	ND	ug/kg	31.5	1	07/13/24 16:14	07/14/24 10:50	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1	07/13/24 16:14	07/14/24 10:50	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1	07/13/24 16:14	07/14/24 10:50	460-00-4	
1,2-Dichloroethane-d4 (S)	88	%	70-130	1	07/13/24 16:14	07/14/24 10:50	17060-07-0	

8260D MSV TCLP

Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/18/24 13:51

Pace Analytical Services - Charlotte

Benzene	ND	ug/L	100	20		07/20/24 06:10	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/20/24 06:10	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/20/24 06:10	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/20/24 06:10	108-90-7	
Chloroform	ND	ug/L	100	20		07/20/24 06:10	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/20/24 06:10	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/20/24 06:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/20/24 06:10	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/20/24 06:10	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/20/24 06:10	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/20/24 06:10	75-01-4	v2
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%	70-130	20		07/20/24 06:10	17060-07-0	
Toluene-d8 (S)	98	%	70-130	20		07/20/24 06:10	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130	20		07/20/24 06:10	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-2D **Lab ID: 92741256004** Collected: 07/10/24 13:30 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: SW-846 Pace Analytical Services - Charlotte								
Percent Moisture	65.7	%	0.10	1		07/11/24 16:34		N2
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010B Pace Analytical Services - Asheville								
Flashpoint	>200	deg F	70.0	1		07/23/24 12:27		
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	8.9	Std. Units	0.10	1		07/17/24 12:41		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	4290	mg/kg	1160	100	07/17/24 00:02	07/17/24 05:58		H1,H2
Nitrogen, Nitrate	4270	mg/kg	1160	100	07/17/24 00:02	07/17/24 05:58	14797-55-8	
Nitrogen, Nitrite	25.3	mg/kg	11.6	1	07/17/24 00:02	07/17/24 04:46	14797-65-0	H1,H2
4500 Chloride in Soil								
Analytical Method: SM 4500-Cl-E-2011 Preparation Method: SM 4500-Cl-E-2011 Pace Analytical Services - Asheville								
Chloride	783	mg/kg	29.1	1	07/19/24 12:15	07/22/24 11:50	16887-00-6	
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	2.9	1	07/15/24 20:05	07/17/24 14:45		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	29.1	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-3S Lab ID: 92741256005 Collected: 07/10/24 12:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Leachate Method/Date: 1311; 08/01/24 10:38 Initial pH: 9.7; Final pH: 7.77								
Pace National - Mt. Juliet								
2,4,5-TP (Silvex)	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 17:40	93-72-1	H3
2,4-D	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 17:40	94-75-7	H3
Surrogates								
2,4-DCAA (S)	78.2	%	14.0-158	1	08/04/24 16:54	08/05/24 17:40	19719-28-9	
8081 TCLP Pesticides RVE								
Analytical Method: EPA 8081B Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/25/24 15:00 Initial pH: 4.74; Final pH: 5								
Pace Analytical Services - Charlotte								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:13	58-89-9	H2
Chlordane (Technical)	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 12:13	57-74-9	H2
Endrin	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:13	72-20-8	H2
Heptachlor	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:13	76-44-8	H2
Heptachlor epoxide	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:13	1024-57-3	H2
Methoxychlor	ND	ug/L	1000	1	07/26/24 15:39	07/29/24 12:13	72-43-5	H2
Toxaphene	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 12:13	8001-35-2	H2
Surrogates								
Decachlorobiphenyl (S)	111	%	19-200	1	07/26/24 15:39	07/29/24 12:13	2051-24-3	
Tetrachloro-m-xylene (S)	100	%	10-137	1	07/26/24 15:39	07/29/24 12:13	877-09-8	
9056 IC Anions								
Analytical Method: EPA 9056 Preparation Method: EPA 9056								
Pace Analytical Services - Indianapolis								
Sulfate	48.0	mg/kg	8.5	1	07/27/24 15:30	07/29/24 18:32	14808-79-8	N2
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Calcium	111000	mg/kg	858	10	07/12/24 15:07	07/17/24 14:32	7440-70-2	
Cobalt	16.2	mg/kg	3.4	1	07/12/24 15:07	07/16/24 18:00	7440-48-4	
Manganese	27200	mg/kg	34.3	10	07/12/24 15:07	07/17/24 14:32	7439-96-5	
Sodium	ND	mg/kg	858	10	07/12/24 15:07	07/17/24 14:32	7440-23-5	D3
Zinc	63700	mg/kg	129	50	07/12/24 15:07	07/17/24 15:41	7440-66-6	
6010D ATL ICP, TCLP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.34; Final pH: 5.47								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.30	1	07/19/24 17:49	07/20/24 20:07	7440-38-2	
Barium	ND	mg/L	0.50	1	07/19/24 17:49	07/20/24 20:07	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:07	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:07	7440-47-3	
Lead	ND	mg/L	0.25	1	07/19/24 17:49	07/20/24 20:07	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/19/24 17:49	07/20/24 20:07	7782-49-2	
Silver	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:07	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-3S **Lab ID: 92741256005** Collected: 07/10/24 12:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.34; Final pH: 5.47								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.0050	1	07/19/24 08:30	07/19/24 11:29	7439-97-6	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.76	1	07/18/24 16:30	07/19/24 13:49	7439-97-6	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	54200	mg/kg	163	1	07/18/24 08:39	07/18/24 22:13	7440-70-2	
Cobalt	15.7	mg/kg	1.6	1	07/18/24 08:39	07/18/24 22:13	7440-48-4	
Magnesium	100000	mg/kg	4070	50	07/18/24 08:39	07/20/24 02:03	7439-95-4	
Manganese	30800	mg/kg	163	200	07/18/24 08:39	07/20/24 02:10	7439-96-5	
Sodium	755	mg/kg	163	1	07/18/24 08:39	07/18/24 22:13	7440-23-5	
Zinc	74900	mg/kg	3250	200	07/18/24 08:39	07/20/24 02:10	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.071	mg/kg	0.024	1	07/17/24 09:38	07/17/24 15:41	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/16/24 13:00 Initial pH: 5.09; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/19/24 14:09	07/21/24 18:44	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 18:44	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	59	%	10-133	1	07/19/24 14:09	07/21/24 18:44	4165-60-0	
2-Fluorobiphenyl (S)	52	%	10-130	1	07/19/24 14:09	07/21/24 18:44	321-60-8	
Terphenyl-d14 (S)	59	%	10-193	1	07/19/24 14:09	07/21/24 18:44	1718-51-0	
Phenol-d6 (S)	29	%	10-130	1	07/19/24 14:09	07/21/24 18:44	13127-88-3	
2-Fluorophenol (S)	37	%	10-130	1	07/19/24 14:09	07/21/24 18:44	367-12-4	
2,4,6-Tribromophenol (S)	61	%	10-166	1	07/19/24 14:09	07/21/24 18:44	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-3S Lab ID: 92741256005 Collected: 07/10/24 12:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Acetone	ND	ug/kg	1450	1	07/13/24 16:14	07/14/24 11:08	67-64-1	
Benzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	71-43-2	
Bromobenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	108-86-1	
Bromochloromethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	74-97-5	
Bromodichloromethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	75-27-4	
Bromoform	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	75-25-2	
Bromomethane	ND	ug/kg	289	1	07/13/24 16:14	07/14/24 11:08	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	1450	1	07/13/24 16:14	07/14/24 11:08	78-93-3	
n-Butylbenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	104-51-8	
sec-Butylbenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	135-98-8	
tert-Butylbenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	98-06-6	
Carbon tetrachloride	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	56-23-5	
Chlorobenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	108-90-7	
Chloroethane	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 11:08	75-00-3	
Chloroform	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	67-66-3	
Chloromethane	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 11:08	74-87-3	
2-Chlorotoluene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	95-49-8	
4-Chlorotoluene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	96-12-8	
Dibromochloromethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	106-93-4	
Dibromomethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 11:08	75-71-8	
1,1-Dichloroethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	75-34-3	
1,2-Dichloroethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	107-06-2	
1,1-Dichloroethene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	156-60-5	
1,2-Dichloropropane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	78-87-5	
1,3-Dichloropropane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	142-28-9	
2,2-Dichloropropane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	10061-02-6	
Diisopropyl ether	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	108-20-3	
Ethylbenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 11:08	87-68-3	
2-Hexanone	ND	ug/kg	723	1	07/13/24 16:14	07/14/24 11:08	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	98-82-8	
p-Isopropyltoluene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	99-87-6	
Methylene Chloride	ND	ug/kg	289	1	07/13/24 16:14	07/14/24 11:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	723	1	07/13/24 16:14	07/14/24 11:08	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-3S Lab ID: 92741256005 Collected: 07/10/24 12:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Methyl-tert-butyl ether	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	1634-04-4	
Naphthalene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	91-20-3	
n-Propylbenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	103-65-1	
Styrene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	79-34-5	
Tetrachloroethene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	127-18-4	
Toluene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	79-00-5	
Trichloroethene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	79-01-6	
Trichlorofluoromethane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	108-67-8	
Vinyl acetate	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	108-05-4	
Vinyl chloride	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 11:08	75-01-4	
Xylene (Total)	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 11:08	1330-20-7	
m&p-Xylene	ND	ug/kg	145	1	07/13/24 16:14	07/14/24 11:08	179601-23-1	
o-Xylene	ND	ug/kg	72.3	1	07/13/24 16:14	07/14/24 11:08	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1	07/13/24 16:14	07/14/24 11:08	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1	07/13/24 16:14	07/14/24 11:08	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	70-130	1	07/13/24 16:14	07/14/24 11:08	17060-07-0	

8260D MSV TCLP

Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/18/24 13:51

Pace Analytical Services - Charlotte

Benzene	ND	ug/L	100	20		07/20/24 06:28	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/20/24 06:28	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/20/24 06:28	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/20/24 06:28	108-90-7	
Chloroform	ND	ug/L	100	20		07/20/24 06:28	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/20/24 06:28	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/20/24 06:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/20/24 06:28	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/20/24 06:28	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/20/24 06:28	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/20/24 06:28	75-01-4	v2
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	70-130	20		07/20/24 06:28	17060-07-0	
Toluene-d8 (S)	97	%	70-130	20		07/20/24 06:28	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130	20		07/20/24 06:28	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-3S **Lab ID: 92741256005** Collected: 07/10/24 12:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: SW-846 Pace Analytical Services - Charlotte								
Percent Moisture	71.1	%	0.10	1		07/11/24 16:34		N2
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010B Pace Analytical Services - Asheville								
Flashpoint	>200	deg F	70.0	1		07/23/24 12:58		
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	9.2	Std. Units	0.10	1		07/17/24 12:44		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	2990	mg/kg	1360	100	07/17/24 00:02	07/17/24 05:55		H1,H2
Nitrogen, Nitrate	2970	mg/kg	1360	100	07/17/24 00:02	07/17/24 05:55	14797-55-8	
Nitrogen, Nitrite	23.7	mg/kg	13.6	1	07/17/24 00:02	07/17/24 04:43	14797-65-0	H1,H2
4500 Chloride in Soil								
Analytical Method: SM 4500-Cl-E-2011 Preparation Method: SM 4500-Cl-E-2011 Pace Analytical Services - Asheville								
Chloride	375	mg/kg	33.8	1	07/19/24 12:15	07/22/24 11:51	16887-00-6	
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	3.4	1	07/15/24 20:05	07/17/24 14:46		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	34.4	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-3D Lab ID: 92741256006 Collected: 07/10/24 11:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Leachate Method/Date: 1311; 08/01/24 10:38 Initial pH: 9.59; Final pH: 7.21								
Pace National - Mt. Juliet								
2,4,5-TP (Silvex)	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 17:52	93-72-1	H3
2,4-D	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 17:52	94-75-7	H3
Surrogates								
2,4-DCAA (S)	78.2	%	14.0-158	1	08/04/24 16:54	08/05/24 17:52	19719-28-9	
8081 TCLP Pesticides RVE								
Analytical Method: EPA 8081B Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/25/24 15:00 Initial pH: 5.86; Final pH: 5								
Pace Analytical Services - Charlotte								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:39	58-89-9	H2
Chlordane (Technical)	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 12:39	57-74-9	H2
Endrin	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:39	72-20-8	H2
Heptachlor	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:39	76-44-8	H2
Heptachlor epoxide	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:39	1024-57-3	H2
Methoxychlor	ND	ug/L	1000	1	07/26/24 15:39	07/29/24 12:39	72-43-5	H2
Toxaphene	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 12:39	8001-35-2	H2
Surrogates								
Decachlorobiphenyl (S)	138	%	19-200	1	07/26/24 15:39	07/29/24 12:39	2051-24-3	
Tetrachloro-m-xylene (S)	117	%	10-137	1	07/26/24 15:39	07/29/24 12:39	877-09-8	
9056 IC Anions								
Analytical Method: EPA 9056 Preparation Method: EPA 9056								
Pace Analytical Services - Indianapolis								
Sulfate	56.9	mg/kg	9.2	1	07/27/24 15:30	07/29/24 19:07	14808-79-8	N2
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Calcium	48700	mg/kg	896	10	07/12/24 15:07	07/17/24 14:37	7440-70-2	
Cobalt	27.8	mg/kg	3.6	1	07/12/24 15:07	07/16/24 18:05	7440-48-4	
Manganese	10300	mg/kg	35.8	10	07/12/24 15:07	07/17/24 14:37	7439-96-5	
Sodium	1120	mg/kg	896	10	07/12/24 15:07	07/17/24 14:37	7440-23-5	
Zinc	34500	mg/kg	26.9	10	07/12/24 15:07	07/17/24 14:37	7440-66-6	
6010D ATL ICP, TCLP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.47; Final pH: 5.09								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.30	1	07/19/24 17:49	07/20/24 20:18	7440-38-2	
Barium	ND	mg/L	0.50	1	07/19/24 17:49	07/20/24 20:18	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:18	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:18	7440-47-3	
Lead	ND	mg/L	0.25	1	07/19/24 17:49	07/20/24 20:18	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/19/24 17:49	07/20/24 20:18	7782-49-2	
Silver	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:18	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-3D Lab ID: 92741256006 Collected: 07/10/24 11:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 9.47; Final pH: 5.09								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.0050	1	07/19/24 08:30	07/19/24 11:32	7439-97-6	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.92	1	07/18/24 16:30	07/19/24 13:52	7439-97-6	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	46900	mg/kg	186	1	07/19/24 08:51	07/20/24 05:11	7440-70-2	
Cobalt	19.1	mg/kg	1.9	1	07/19/24 08:51	07/20/24 05:11	7440-48-4	
Magnesium	90300	mg/kg	932	10	07/19/24 08:51	07/22/24 15:12	7439-95-4	
Manganese	15500	mg/kg	93.2	100	07/19/24 08:51	07/22/24 15:24	7439-96-5	
Sodium	1150	mg/kg	186	1	07/19/24 08:51	07/20/24 05:11	7440-23-5	
Zinc	44500	mg/kg	1860	100	07/19/24 08:51	07/22/24 15:24	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.29	mg/kg	0.034	1	07/17/24 09:38	07/17/24 15:43	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/16/24 13:00 Initial pH: 5.18; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/19/24 14:09	07/21/24 19:09	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:09	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	65	%	10-133	1	07/19/24 14:09	07/21/24 19:09	4165-60-0	
2-Fluorobiphenyl (S)	60	%	10-130	1	07/19/24 14:09	07/21/24 19:09	321-60-8	
Terphenyl-d14 (S)	63	%	10-193	1	07/19/24 14:09	07/21/24 19:09	1718-51-0	
Phenol-d6 (S)	31	%	10-130	1	07/19/24 14:09	07/21/24 19:09	13127-88-3	
2-Fluorophenol (S)	39	%	10-130	1	07/19/24 14:09	07/21/24 19:09	367-12-4	
2,4,6-Tribromophenol (S)	66	%	10-166	1	07/19/24 14:09	07/21/24 19:09	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-3D Lab ID: 92741256006 Collected: 07/10/24 11:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Acetone	ND	ug/kg	840	1	07/13/24 16:14	07/14/24 11:25	67-64-1	
Benzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	71-43-2	
Bromobenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	108-86-1	
Bromochloromethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	74-97-5	
Bromodichloromethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	75-27-4	
Bromoform	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	75-25-2	
Bromomethane	ND	ug/kg	168	1	07/13/24 16:14	07/14/24 11:25	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	840	1	07/13/24 16:14	07/14/24 11:25	78-93-3	
n-Butylbenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	104-51-8	
sec-Butylbenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	135-98-8	
tert-Butylbenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	98-06-6	
Carbon tetrachloride	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	56-23-5	
Chlorobenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	108-90-7	
Chloroethane	ND	ug/kg	84.0	1	07/13/24 16:14	07/14/24 11:25	75-00-3	
Chloroform	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	67-66-3	
Chloromethane	ND	ug/kg	84.0	1	07/13/24 16:14	07/14/24 11:25	74-87-3	
2-Chlorotoluene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	95-49-8	
4-Chlorotoluene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	96-12-8	
Dibromochloromethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	106-93-4	
Dibromomethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	84.0	1	07/13/24 16:14	07/14/24 11:25	75-71-8	
1,1-Dichloroethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	75-34-3	
1,2-Dichloroethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	107-06-2	
1,1-Dichloroethene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	156-60-5	
1,2-Dichloropropane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	78-87-5	
1,3-Dichloropropane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	142-28-9	
2,2-Dichloropropane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	10061-02-6	
Diisopropyl ether	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	108-20-3	
Ethylbenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	84.0	1	07/13/24 16:14	07/14/24 11:25	87-68-3	
2-Hexanone	ND	ug/kg	420	1	07/13/24 16:14	07/14/24 11:25	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	98-82-8	
p-Isopropyltoluene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	99-87-6	
Methylene Chloride	ND	ug/kg	168	1	07/13/24 16:14	07/14/24 11:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	420	1	07/13/24 16:14	07/14/24 11:25	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-3D Lab ID: 92741256006 Collected: 07/10/24 11:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Methyl-tert-butyl ether	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	1634-04-4	
Naphthalene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	91-20-3	
n-Propylbenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	103-65-1	
Styrene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	79-34-5	
Tetrachloroethene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	127-18-4	
Toluene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	79-00-5	
Trichloroethene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	79-01-6	
Trichlorofluoromethane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	108-67-8	
Vinyl acetate	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	108-05-4	
Vinyl chloride	ND	ug/kg	84.0	1	07/13/24 16:14	07/14/24 11:25	75-01-4	
Xylene (Total)	ND	ug/kg	84.0	1	07/13/24 16:14	07/14/24 11:25	1330-20-7	
m&p-Xylene	ND	ug/kg	84.0	1	07/13/24 16:14	07/14/24 11:25	179601-23-1	
o-Xylene	ND	ug/kg	42.0	1	07/13/24 16:14	07/14/24 11:25	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	70-130	1	07/13/24 16:14	07/14/24 11:25	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1	07/13/24 16:14	07/14/24 11:25	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-130	1	07/13/24 16:14	07/14/24 11:25	17060-07-0	

8260D MSV TCLP

Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/18/24 13:51

Pace Analytical Services - Charlotte

Benzene	ND	ug/L	100	20		07/20/24 06:46	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/20/24 06:46	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/20/24 06:46	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/20/24 06:46	108-90-7	
Chloroform	ND	ug/L	100	20		07/20/24 06:46	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/20/24 06:46	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/20/24 06:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/20/24 06:46	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/20/24 06:46	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/20/24 06:46	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/20/24 06:46	75-01-4	v2
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	70-130	20		07/20/24 06:46	17060-07-0	
Toluene-d8 (S)	99	%	70-130	20		07/20/24 06:46	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130	20		07/20/24 06:46	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-3D **Lab ID: 92741256006** Collected: 07/10/24 11:15 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: SW-846 Pace Analytical Services - Charlotte								
Percent Moisture	72.8	%	0.10	1		07/11/24 16:34		N2
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010B Pace Analytical Services - Asheville								
Flashpoint	>200	deg F	70.0	1		07/23/24 13:25		
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	9.1	Std. Units	0.10	1		07/17/24 12:47		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	3480	mg/kg	1440	100	07/17/24 00:02	07/17/24 05:54		H1,H2
Nitrogen, Nitrate	3460	mg/kg	1440	100	07/17/24 00:02	07/17/24 05:54	14797-55-8	
Nitrogen, Nitrite	22.9	mg/kg	14.4	1	07/17/24 00:02	07/17/24 04:42	14797-65-0	H1,H2
4500 Chloride in Soil								
Analytical Method: SM 4500-Cl-E-2011 Preparation Method: SM 4500-Cl-E-2011 Pace Analytical Services - Asheville								
Chloride	552	mg/kg	36.2	1	07/19/24 12:15	07/22/24 11:52	16887-00-6	
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	3.7	1	07/15/24 20:05	07/17/24 14:46		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	36.9	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-4S Lab ID: 92741256007 Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
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8081 TCLP Pesticides RVE

Analytical Method: EPA 8081B Preparation Method: EPA 3510C
Leachate Method/Date: EPA 1311; 07/25/24 15:00 Initial pH: 4.62; Final pH: 5
Pace Analytical Services - Charlotte

gamma-BHC (Lindane)	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:26	58-89-9	H2
Chlordane (Technical)	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 12:26	57-74-9	H2
Endrin	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:26	72-20-8	H2
Heptachlor	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:26	76-44-8	H2
Heptachlor epoxide	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:26	1024-57-3	H2
Methoxychlor	ND	ug/L	1000	1	07/26/24 15:39	07/29/24 12:26	72-43-5	H2
Toxaphene	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 12:26	8001-35-2	H2

Surrogates

Decachlorobiphenyl (S)	104	%	19-200	1	07/26/24 15:39	07/29/24 12:26	2051-24-3	
Tetrachloro-m-xylene (S)	86	%	10-137	1	07/26/24 15:39	07/29/24 12:26	877-09-8	

9056 IC Anions

Analytical Method: EPA 9056 Preparation Method: EPA 9056
Pace Analytical Services - Indianapolis

Sulfate	66.4	mg/kg	7.9	1	07/27/24 15:30	07/29/24 19:42	14808-79-8	N2
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6010D ATL ICP

Analytical Method: EPA 6010D Preparation Method: EPA 3050B
Pace Analytical Services - Peachtree Corners, GA

Calcium	72900	mg/kg	820	10	07/12/24 15:07	07/17/24 14:42	7440-70-2	
Cobalt	30.7	mg/kg	3.3	1	07/12/24 15:07	07/16/24 18:10	7440-48-4	
Manganese	54200	mg/kg	164	50	07/12/24 15:07	07/17/24 15:46	7439-96-5	
Sodium	829	mg/kg	820	10	07/12/24 15:07	07/17/24 14:42	7440-23-5	
Zinc	49100	mg/kg	123	50	07/12/24 15:07	07/17/24 15:46	7440-66-6	

6010D ATL ICP, TCLP

Analytical Method: EPA 6010D Preparation Method: EPA 3010A
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 8.25; Final pH: 5.36
Pace Analytical Services - Peachtree Corners, GA

Arsenic	ND	mg/L	0.30	1	07/19/24 17:49	07/20/24 20:22	7440-38-2	
Barium	ND	mg/L	0.50	1	07/19/24 17:49	07/20/24 20:22	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:22	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:22	7440-47-3	
Lead	ND	mg/L	0.25	1	07/19/24 17:49	07/20/24 20:22	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/19/24 17:49	07/20/24 20:22	7782-49-2	
Silver	ND	mg/L	0.10	1	07/19/24 17:49	07/20/24 20:22	7440-22-4	

7470 Mercury, TCLP

Analytical Method: EPA 7470A Preparation Method: EPA 7470A
Leachate Method/Date: EPA 1311; 07/18/24 14:06 Initial pH: 8.25; Final pH: 5.36
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/L	0.0050	1	07/19/24 08:30	07/19/24 11:34	7439-97-6	
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7471 Mercury

Analytical Method: EPA 7471B Preparation Method: EPA 7471B
Pace Analytical Services - Peachtree Corners, GA

Mercury	ND	mg/kg	0.77	1	07/18/24 16:30	07/19/24 13:55	7439-97-6	
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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-4S Lab ID: 92741256007 Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	75000	mg/kg	163	1	07/19/24 08:51	07/20/24 05:15	7440-70-2	
Cobalt	37.5	mg/kg	1.6	1	07/19/24 08:51	07/20/24 05:15	7440-48-4	
Magnesium	45600	mg/kg	408	5	07/19/24 08:51	07/22/24 15:27	7439-95-4	
Manganese	38800	mg/kg	408	500	07/19/24 08:51	07/22/24 16:07	7439-96-5	
Sodium	866	mg/kg	163	1	07/19/24 08:51	07/20/24 05:15	7440-23-5	
Zinc	48600	mg/kg	3260	200	07/19/24 08:51	07/22/24 15:31	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.10	mg/kg	0.031	1	07/17/24 09:38	07/17/24 15:50	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/17/24 13:00 Initial pH: 5.19; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/19/24 14:09	07/21/24 19:35	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/19/24 14:09	07/21/24 19:35	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	57	%	10-133	1	07/19/24 14:09	07/21/24 19:35	4165-60-0	
2-Fluorobiphenyl (S)	51	%	10-130	1	07/19/24 14:09	07/21/24 19:35	321-60-8	
Terphenyl-d14 (S)	61	%	10-193	1	07/19/24 14:09	07/21/24 19:35	1718-51-0	
Phenol-d6 (S)	18	%	10-130	1	07/19/24 14:09	07/21/24 19:35	13127-88-3	
2-Fluorophenol (S)	9	%	10-130	1	07/19/24 14:09	07/21/24 19:35	367-12-4	S0
2,4,6-Tribromophenol (S)	10	%	10-166	1	07/19/24 14:09	07/21/24 19:35	118-79-6	
8260D/5035A/5030B Volatiles								
Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B								
Pace Analytical Services - Charlotte								
Acetone	ND	ug/kg	996	1	07/13/24 16:14	07/14/24 11:43	67-64-1	
Benzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	71-43-2	
Bromobenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	108-86-1	
Bromochloromethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	74-97-5	
Bromodichloromethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	75-27-4	
Bromoform	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	75-25-2	
Bromomethane	ND	ug/kg	199	1	07/13/24 16:14	07/14/24 11:43	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	996	1	07/13/24 16:14	07/14/24 11:43	78-93-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-4S Lab ID: 92741256007 Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
n-Butylbenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	104-51-8	
sec-Butylbenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	135-98-8	
tert-Butylbenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	98-06-6	
Carbon tetrachloride	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	56-23-5	
Chlorobenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	108-90-7	
Chloroethane	ND	ug/kg	99.6	1	07/13/24 16:14	07/14/24 11:43	75-00-3	
Chloroform	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	67-66-3	
Chloromethane	ND	ug/kg	99.6	1	07/13/24 16:14	07/14/24 11:43	74-87-3	
2-Chlorotoluene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	95-49-8	
4-Chlorotoluene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	96-12-8	
Dibromochloromethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	106-93-4	
Dibromomethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	99.6	1	07/13/24 16:14	07/14/24 11:43	75-71-8	
1,1-Dichloroethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	75-34-3	
1,2-Dichloroethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	107-06-2	
1,1-Dichloroethene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	156-60-5	
1,2-Dichloropropane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	78-87-5	
1,3-Dichloropropane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	142-28-9	
2,2-Dichloropropane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	10061-02-6	
Diisopropyl ether	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	108-20-3	
Ethylbenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	99.6	1	07/13/24 16:14	07/14/24 11:43	87-68-3	
2-Hexanone	ND	ug/kg	498	1	07/13/24 16:14	07/14/24 11:43	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	98-82-8	
p-Isopropyltoluene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	99-87-6	
Methylene Chloride	ND	ug/kg	199	1	07/13/24 16:14	07/14/24 11:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	498	1	07/13/24 16:14	07/14/24 11:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	1634-04-4	
Naphthalene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	91-20-3	
n-Propylbenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	103-65-1	
Styrene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	79-34-5	
Tetrachloroethene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	127-18-4	
Toluene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	108-88-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-4S Lab ID: 92741256007 Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
1,2,3-Trichlorobenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	79-00-5	
Trichloroethene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	79-01-6	
Trichlorofluoromethane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	108-67-8	
Vinyl acetate	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	108-05-4	
Vinyl chloride	ND	ug/kg	99.6	1	07/13/24 16:14	07/14/24 11:43	75-01-4	
Xylene (Total)	ND	ug/kg	99.6	1	07/13/24 16:14	07/14/24 11:43	1330-20-7	
m&p-Xylene	ND	ug/kg	99.6	1	07/13/24 16:14	07/14/24 11:43	179601-23-1	
o-Xylene	ND	ug/kg	49.8	1	07/13/24 16:14	07/14/24 11:43	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1	07/13/24 16:14	07/14/24 11:43	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1	07/13/24 16:14	07/14/24 11:43	460-00-4	
1,2-Dichloroethane-d4 (S)	86	%	70-130	1	07/13/24 16:14	07/14/24 11:43	17060-07-0	
8260D MSV TCLP		Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/18/24 13:51 Pace Analytical Services - Charlotte						
Benzene	ND	ug/L	100	20		07/20/24 07:04	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/20/24 07:04	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/20/24 07:04	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/20/24 07:04	108-90-7	
Chloroform	ND	ug/L	100	20		07/20/24 07:04	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/20/24 07:04	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/20/24 07:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/20/24 07:04	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/20/24 07:04	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/20/24 07:04	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/20/24 07:04	75-01-4	v2
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	70-130	20		07/20/24 07:04	17060-07-0	
Toluene-d8 (S)	100	%	70-130	20		07/20/24 07:04	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130	20		07/20/24 07:04	460-00-4	
Percent Moisture		Analytical Method: SW-846 Pace Analytical Services - Charlotte						
Percent Moisture	69.7	%	0.10	1		07/11/24 16:34		N2
1010 Flashpoint,Closed Cup		Analytical Method: EPA 1010B Pace Analytical Services - Asheville						
Flashpoint	>200	deg F	70.0	1		07/23/24 14:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-4S **Lab ID: 92741256007** Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	9.5	Std. Units	0.10	1		07/19/24 15:34		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	3120	mg/kg	1290	100	08/14/24 22:53	08/15/24 01:00		H1,H2
Nitrogen, Nitrate	3110	mg/kg	1290	100	08/14/24 22:53	08/15/24 01:00	14797-55-8	
Nitrogen, Nitrite	13.5	mg/kg	12.9	1	08/14/24 22:53	08/15/24 00:43	14797-65-0	H1,H2
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	3.3	1	07/15/24 20:05	07/17/24 14:46		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	32.7	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-4D Lab ID: 92741256008 Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Leachate Method/Date: 1311; 08/01/24 10:38 Initial pH: 9.41; Final pH: 5.85								
Pace National - Mt. Juliet								
2,4,5-TP (Silvex)	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 18:37	93-72-1	H3
2,4-D	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 18:37	94-75-7	H3
Surrogates								
2,4-DCAA (S)	67.0	%	14.0-158	1	08/04/24 16:54	08/05/24 18:37	19719-28-9	
8081 TCLP Pesticides RVE								
Analytical Method: EPA 8081B Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/25/24 15:00 Initial pH: 4.62; Final pH: 5								
Pace Analytical Services - Charlotte								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:53	58-89-9	H2
Chlordane (Technical)	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 12:53	57-74-9	H2
Endrin	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:53	72-20-8	H2
Heptachlor	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:53	76-44-8	H2
Heptachlor epoxide	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 12:53	1024-57-3	H2
Methoxychlor	ND	ug/L	1000	1	07/26/24 15:39	07/29/24 12:53	72-43-5	H2
Toxaphene	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 12:53	8001-35-2	H2
Surrogates								
Decachlorobiphenyl (S)	145	%	19-200	1	07/26/24 15:39	07/29/24 12:53	2051-24-3	
Tetrachloro-m-xylene (S)	131	%	10-137	1	07/26/24 15:39	07/29/24 12:53	877-09-8	
9056 IC Anions								
Analytical Method: EPA 9056 Preparation Method: EPA 9056								
Pace Analytical Services - Indianapolis								
Sulfate	53.5	mg/kg	7.0	1	07/27/24 15:30	07/29/24 20:17	14808-79-8	N2
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Calcium	69800	mg/kg	715	10	07/12/24 15:07	07/17/24 14:47	7440-70-2	
Cobalt	42.6	mg/kg	2.9	1	07/12/24 15:07	07/16/24 18:15	7440-48-4	
Manganese	37200	mg/kg	143	50	07/12/24 15:07	07/17/24 15:51	7439-96-5	
Sodium	ND	mg/kg	715	10	07/12/24 15:07	07/17/24 14:47	7440-23-5	D3
Zinc	45800	mg/kg	107	50	07/12/24 15:07	07/17/24 15:51	7440-66-6	
6010D ATL ICP, TCLP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 07/19/24 13:43 Initial pH: 9.08; Final pH: 3.58								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.30	1	07/20/24 14:02	07/20/24 20:38	7440-38-2	
Barium	ND	mg/L	0.50	1	07/20/24 14:02	07/20/24 20:38	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 20:38	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 20:38	7440-47-3	
Lead	ND	mg/L	0.25	1	07/20/24 14:02	07/20/24 20:38	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/20/24 14:02	07/20/24 20:38	7782-49-2	
Silver	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 20:38	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-4D Lab ID: 92741256008 Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Leachate Method/Date: EPA 1311; 07/19/24 13:43 Initial pH: 9.08; Final pH: 3.58								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.0050	1	07/22/24 10:00	07/22/24 13:18	7439-97-6	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.64	1	07/18/24 16:30	07/19/24 14:02	7439-97-6	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	75200	mg/kg	25700	200	07/19/24 08:51	07/22/24 15:38	7440-70-2	
Cobalt	28.5	mg/kg	1.3	1	07/19/24 08:51	07/20/24 05:18	7440-48-4	
Magnesium	40000	mg/kg	322	5	07/19/24 08:51	07/22/24 15:35	7439-95-4	
Manganese	36100	mg/kg	322	500	07/19/24 08:51	07/22/24 16:10	7439-96-5	
Sodium	753	mg/kg	129	1	07/19/24 08:51	07/20/24 05:18	7440-23-5	
Zinc	46500	mg/kg	2570	200	07/19/24 08:51	07/22/24 15:38	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.089	mg/kg	0.025	1	07/17/24 09:38	07/17/24 16:01	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/17/24 13:00 Initial pH: 5.3; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	106-46-7	R1
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	121-14-2	R1
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	118-74-1	R1
Hexachloroethane	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	95-48-7	R1
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	15831-10-4	R1
Nitrobenzene	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	98-95-3	R1
Pentachlorophenol	ND	ug/L	100	1	07/23/24 00:21	07/23/24 13:26	87-86-5	M1
Pyridine	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	95-95-4	R1
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/23/24 00:21	07/23/24 13:26	88-06-2	R1
Surrogates								
Nitrobenzene-d5 (S)	74	%	10-133	1	07/23/24 00:21	07/23/24 13:26	4165-60-0	
2-Fluorobiphenyl (S)	76	%	10-130	1	07/23/24 00:21	07/23/24 13:26	321-60-8	
Terphenyl-d14 (S)	84	%	10-193	1	07/23/24 00:21	07/23/24 13:26	1718-51-0	
Phenol-d6 (S)	18	%	10-130	1	07/23/24 00:21	07/23/24 13:26	13127-88-3	
2-Fluorophenol (S)	8	%	10-130	1	07/23/24 00:21	07/23/24 13:26	367-12-4	S0
2,4,6-Tribromophenol (S)	16	%	10-166	1	07/23/24 00:21	07/23/24 13:26	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-4D Lab ID: 92741256008 Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Acetone	ND	ug/kg	1200	1	07/13/24 16:14	07/14/24 12:00	67-64-1	
Benzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	71-43-2	
Bromobenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	108-86-1	
Bromochloromethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	74-97-5	
Bromodichloromethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	75-27-4	
Bromoform	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	75-25-2	
Bromomethane	ND	ug/kg	239	1	07/13/24 16:14	07/14/24 12:00	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	1200	1	07/13/24 16:14	07/14/24 12:00	78-93-3	
n-Butylbenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	104-51-8	
sec-Butylbenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	135-98-8	
tert-Butylbenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	98-06-6	
Carbon tetrachloride	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	56-23-5	
Chlorobenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	108-90-7	
Chloroethane	ND	ug/kg	120	1	07/13/24 16:14	07/14/24 12:00	75-00-3	
Chloroform	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	67-66-3	
Chloromethane	ND	ug/kg	120	1	07/13/24 16:14	07/14/24 12:00	74-87-3	
2-Chlorotoluene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	95-49-8	
4-Chlorotoluene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	96-12-8	
Dibromochloromethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	106-93-4	
Dibromomethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	120	1	07/13/24 16:14	07/14/24 12:00	75-71-8	
1,1-Dichloroethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	75-34-3	
1,2-Dichloroethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	107-06-2	
1,1-Dichloroethene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	156-60-5	
1,2-Dichloropropane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	78-87-5	
1,3-Dichloropropane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	142-28-9	
2,2-Dichloropropane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	10061-02-6	
Diisopropyl ether	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	108-20-3	
Ethylbenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	120	1	07/13/24 16:14	07/14/24 12:00	87-68-3	
2-Hexanone	ND	ug/kg	598	1	07/13/24 16:14	07/14/24 12:00	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	98-82-8	
p-Isopropyltoluene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	99-87-6	
Methylene Chloride	ND	ug/kg	239	1	07/13/24 16:14	07/14/24 12:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	598	1	07/13/24 16:14	07/14/24 12:00	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-4D Lab ID: 92741256008 Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Methyl-tert-butyl ether	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	1634-04-4	
Naphthalene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	91-20-3	
n-Propylbenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	103-65-1	
Styrene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	79-34-5	
Tetrachloroethene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	127-18-4	
Toluene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	79-00-5	
Trichloroethene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	79-01-6	
Trichlorofluoromethane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	108-67-8	
Vinyl acetate	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	108-05-4	
Vinyl chloride	ND	ug/kg	120	1	07/13/24 16:14	07/14/24 12:00	75-01-4	
Xylene (Total)	ND	ug/kg	120	1	07/13/24 16:14	07/14/24 12:00	1330-20-7	
m&p-Xylene	ND	ug/kg	120	1	07/13/24 16:14	07/14/24 12:00	179601-23-1	
o-Xylene	ND	ug/kg	59.8	1	07/13/24 16:14	07/14/24 12:00	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	70-130	1	07/13/24 16:14	07/14/24 12:00	2037-26-5	
4-Bromofluorobenzene (S)	101	%	70-130	1	07/13/24 16:14	07/14/24 12:00	460-00-4	
1,2-Dichloroethane-d4 (S)	86	%	70-130	1	07/13/24 16:14	07/14/24 12:00	17060-07-0	

8260D MSV TCLP

Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/18/24 13:51

Pace Analytical Services - Charlotte

Benzene	ND	ug/L	100	20		07/20/24 07:22	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/20/24 07:22	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/20/24 07:22	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/20/24 07:22	108-90-7	
Chloroform	ND	ug/L	100	20		07/20/24 07:22	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/20/24 07:22	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/20/24 07:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/20/24 07:22	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/20/24 07:22	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/20/24 07:22	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/20/24 07:22	75-01-4	v2
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	70-130	20		07/20/24 07:22	17060-07-0	
Toluene-d8 (S)	98	%	70-130	20		07/20/24 07:22	2037-26-5	
4-Bromofluorobenzene (S)	96	%	70-130	20		07/20/24 07:22	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-4D **Lab ID: 92741256008** Collected: 07/10/24 16:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: SW-846 Pace Analytical Services - Charlotte								
Percent Moisture	65.2	%	0.10	1		07/11/24 16:34		N2
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010B Pace Analytical Services - Asheville								
Flashpoint	>200	deg F	70.0	1		07/23/24 15:26		
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	9.2	Std. Units	0.10	1		07/19/24 15:36		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	4500	mg/kg	1120	100	07/23/24 22:57	07/24/24 01:30		H1,H2, M1
Nitrogen, Nitrate	4500	mg/kg	1120	100	07/23/24 22:57	07/24/24 01:30	14797-55-8	
Nitrogen, Nitrite	ND	mg/kg	112	10	07/23/24 22:57	07/24/24 01:39	14797-65-0	H1,H2, M1
4500 Chloride in Soil								
Analytical Method: SM 4500-CI-E-2011 Preparation Method: SM 4500-CI-E-2011 Pace Analytical Services - Asheville								
Chloride	489	mg/kg	28.7	1	07/19/24 12:15	07/22/24 11:53	16887-00-6	
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	2.9	1	07/15/24 20:05	07/17/24 14:47		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	28.8	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-5S Lab ID: 92741256009 Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Pesticides (GC) 8081B TCLP								
Analytical Method: EPA 8081B Preparation Method: 3510C								
Leachate Method/Date: 1311; 08/14/24 12:46 Initial pH: 8.99; Final pH: 4.88								
Pace National - Mt. Juliet								
Chlordane (Technical)	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:46	57-74-9	
Endrin	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:46	72-20-8	
gamma-BHC (Lindane)	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:46	58-89-9	
Heptachlor	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:46	76-44-8	
Heptachlor epoxide	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:46	1024-57-3	
Methoxychlor	ND	mg/L	0.00500	1	08/16/24 07:37	08/16/24 15:46	72-43-5	
Toxaphene	ND	mg/L	0.0100	1	08/16/24 07:37	08/16/24 15:46	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	86.3	%	10.0-128	1	08/16/24 07:37	08/16/24 15:46	2051-24-3	
Tetrachloro-m-xylene (S)	98.7	%	10.0-127	1	08/16/24 07:37	08/16/24 15:46	877-09-8	
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Leachate Method/Date: 1311; 08/01/24 10:38 Initial pH: 9.03; Final pH: 5.81								
Pace National - Mt. Juliet								
2,4,5-TP (Silvex)	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 18:49	93-72-1	H3
2,4-D	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 18:49	94-75-7	H3
Surrogates								
2,4-DCAA (S)	67.0	%	14.0-158	1	08/04/24 16:54	08/05/24 18:49	19719-28-9	
9056 IC Anions								
Analytical Method: EPA 9056 Preparation Method: EPA 9056								
Pace Analytical Services - Indianapolis								
Sulfate	78.3	mg/kg	7.8	1	07/27/24 15:30	07/29/24 21:28	14808-79-8	N2
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Calcium	101000	mg/kg	769	10	07/12/24 15:07	07/17/24 13:14	7440-70-2	
Cobalt	34.9	mg/kg	3.1	1	07/12/24 15:07	07/16/24 17:25	7440-48-4	
Manganese	27000	mg/kg	30.8	10	07/12/24 15:07	07/17/24 13:14	7439-96-5	
Sodium	1150	mg/kg	769	10	07/12/24 15:07	07/17/24 13:14	7440-23-5	
Zinc	65400	mg/kg	115	50	07/12/24 15:07	07/17/24 15:27	7440-66-6	
6010D ATL ICP, TCLP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 07/19/24 13:43 Initial pH: 8.27; Final pH: 4.16								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.30	1	07/20/24 14:02	07/20/24 20:52	7440-38-2	
Barium	ND	mg/L	0.50	1	07/20/24 14:02	07/20/24 20:52	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 20:52	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 20:52	7440-47-3	
Lead	ND	mg/L	0.25	1	07/20/24 14:02	07/20/24 20:52	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/20/24 14:02	07/20/24 20:52	7782-49-2	
Silver	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 20:52	7440-22-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-5S Lab ID: 92741256009 Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Leachate Method/Date: EPA 1311; 07/19/24 13:43 Initial pH: 8.27; Final pH: 4.16								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.0050	1	07/22/24 10:00	07/22/24 13:21	7439-97-6	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	0.75	1	07/18/24 16:30	07/19/24 14:05	7439-97-6	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	67300	mg/kg	189	1	07/19/24 08:51	07/20/24 05:22	7440-70-2	
Cobalt	23.8	mg/kg	1.9	1	07/19/24 08:51	07/20/24 05:22	7440-48-4	
Magnesium	51000	mg/kg	473	5	07/19/24 08:51	07/22/24 15:42	7439-95-4	
Manganese	37200	mg/kg	189	200	07/19/24 08:51	07/22/24 15:45	7439-96-5	
Sodium	1070	mg/kg	189	1	07/19/24 08:51	07/20/24 05:22	7440-23-5	
Zinc	76000	mg/kg	3780	200	07/19/24 08:51	07/22/24 15:45	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.066	mg/kg	0.028	1	07/17/24 09:38	07/17/24 16:03	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/17/24 13:00 Initial pH: 5.45; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/18/24 22:32	07/19/24 14:14	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:14	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	86	%	10-133	1	07/18/24 22:32	07/19/24 14:14	4165-60-0	
2-Fluorobiphenyl (S)	77	%	10-130	1	07/18/24 22:32	07/19/24 14:14	321-60-8	
Terphenyl-d14 (S)	134	%	10-193	1	07/18/24 22:32	07/19/24 14:14	1718-51-0	
Phenol-d6 (S)	60	%	10-130	1	07/18/24 22:32	07/19/24 14:14	13127-88-3	
2-Fluorophenol (S)	79	%	10-130	1	07/18/24 22:32	07/19/24 14:14	367-12-4	
2,4,6-Tribromophenol (S)	143	%	10-166	1	07/18/24 22:32	07/19/24 14:14	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-5S Lab ID: 92741256009 Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Acetone	ND	ug/kg	636	1	07/13/24 16:14	07/14/24 12:18	67-64-1	
Benzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	71-43-2	
Bromobenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	108-86-1	
Bromochloromethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	74-97-5	
Bromodichloromethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	75-27-4	
Bromoform	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	75-25-2	
Bromomethane	ND	ug/kg	127	1	07/13/24 16:14	07/14/24 12:18	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	636	1	07/13/24 16:14	07/14/24 12:18	78-93-3	
n-Butylbenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	104-51-8	
sec-Butylbenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	135-98-8	
tert-Butylbenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	98-06-6	
Carbon tetrachloride	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	56-23-5	
Chlorobenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	108-90-7	
Chloroethane	ND	ug/kg	63.6	1	07/13/24 16:14	07/14/24 12:18	75-00-3	
Chloroform	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	67-66-3	
Chloromethane	ND	ug/kg	63.6	1	07/13/24 16:14	07/14/24 12:18	74-87-3	
2-Chlorotoluene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	95-49-8	
4-Chlorotoluene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	96-12-8	
Dibromochloromethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	106-93-4	
Dibromomethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	63.6	1	07/13/24 16:14	07/14/24 12:18	75-71-8	
1,1-Dichloroethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	75-34-3	
1,2-Dichloroethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	107-06-2	
1,1-Dichloroethene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	156-60-5	
1,2-Dichloropropane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	78-87-5	
1,3-Dichloropropane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	142-28-9	
2,2-Dichloropropane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	10061-02-6	
Diisopropyl ether	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	108-20-3	
Ethylbenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	63.6	1	07/13/24 16:14	07/14/24 12:18	87-68-3	
2-Hexanone	ND	ug/kg	318	1	07/13/24 16:14	07/14/24 12:18	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	98-82-8	
p-Isopropyltoluene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	99-87-6	
Methylene Chloride	ND	ug/kg	127	1	07/13/24 16:14	07/14/24 12:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	318	1	07/13/24 16:14	07/14/24 12:18	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-5S Lab ID: 92741256009 Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Methyl-tert-butyl ether	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	1634-04-4	
Naphthalene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	91-20-3	
n-Propylbenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	103-65-1	
Styrene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	79-34-5	
Tetrachloroethene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	127-18-4	
Toluene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	79-00-5	
Trichloroethene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	79-01-6	
Trichlorofluoromethane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	108-67-8	
Vinyl acetate	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	108-05-4	
Vinyl chloride	ND	ug/kg	63.6	1	07/13/24 16:14	07/14/24 12:18	75-01-4	
Xylene (Total)	ND	ug/kg	63.6	1	07/13/24 16:14	07/14/24 12:18	1330-20-7	
m&p-Xylene	ND	ug/kg	63.6	1	07/13/24 16:14	07/14/24 12:18	179601-23-1	
o-Xylene	ND	ug/kg	31.8	1	07/13/24 16:14	07/14/24 12:18	95-47-6	
Surrogates								
Toluene-d8 (S)	98	%	70-130	1	07/13/24 16:14	07/14/24 12:18	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130	1	07/13/24 16:14	07/14/24 12:18	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-130	1	07/13/24 16:14	07/14/24 12:18	17060-07-0	

8260D MSV TCLP

Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/18/24 13:51

Pace Analytical Services - Charlotte

Benzene	ND	ug/L	100	20		07/20/24 07:40	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/20/24 07:40	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/20/24 07:40	56-23-5	
Chlorobenzene	ND	ug/L	100	20		07/20/24 07:40	108-90-7	
Chloroform	ND	ug/L	100	20		07/20/24 07:40	67-66-3	
1,4-Dichlorobenzene	ND	ug/L	100	20		07/20/24 07:40	106-46-7	
1,2-Dichloroethane	ND	ug/L	100	20		07/20/24 07:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/20/24 07:40	75-35-4	
Tetrachloroethene	ND	ug/L	100	20		07/20/24 07:40	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/20/24 07:40	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/20/24 07:40	75-01-4	v2
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%	70-130	20		07/20/24 07:40	17060-07-0	
Toluene-d8 (S)	101	%	70-130	20		07/20/24 07:40	2037-26-5	
4-Bromofluorobenzene (S)	97	%	70-130	20		07/20/24 07:40	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-5S **Lab ID: 92741256009** Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: SW-846 Pace Analytical Services - Charlotte								
Percent Moisture	68.3	%	0.10	1		07/11/24 16:34		N2
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010B Pace Analytical Services - Asheville								
Flashpoint	>200	deg F	70.0	1		07/24/24 10:40		
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	9.0	Std. Units	0.10	1		07/19/24 15:41		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	5890	mg/kg	1260	100	07/17/24 00:02	07/17/24 05:59		H1,H2
Nitrogen, Nitrate	5890	mg/kg	1260	100	07/17/24 00:02	07/17/24 05:59	14797-55-8	
Nitrogen, Nitrite	ND	mg/kg	1260	100	07/17/24 00:02	07/17/24 05:59	14797-65-0	H1,H2
4500 Chloride in Soil								
Analytical Method: SM 4500-Cl-E-2011 Preparation Method: SM 4500-Cl-E-2011 Pace Analytical Services - Asheville								
Chloride	856	mg/kg	31.2	1	07/19/24 12:15	07/22/24 11:54	16887-00-6	
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	3.2	1	07/15/24 20:05	07/17/24 14:50		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	31.5	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
Pace Project No.: 92741256

Sample: SS-5D Lab ID: 92741256010 Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Leachate Method/Date: 1311; 08/01/24 10:38 Initial pH: 8.98; Final pH: 5.73								
Pace National - Mt. Juliet								
2,4,5-TP (Silvex)	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 19:00	93-72-1	H3
2,4-D	ND	mg/L	0.00200	1	08/04/24 16:54	08/05/24 19:00	94-75-7	H3
Surrogates								
2,4-DCAA (S)	72.4	%	14.0-158	1	08/04/24 16:54	08/05/24 19:00	19719-28-9	
8081 TCLP Pesticides RVE								
Analytical Method: EPA 8081B Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/25/24 15:00 Initial pH: 5.1; Final pH: 5								
Pace Analytical Services - Charlotte								
gamma-BHC (Lindane)	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 13:06	58-89-9	H2
Chlordane (Technical)	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 13:06	57-74-9	H2
Endrin	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 13:06	72-20-8	H2
Heptachlor	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 13:06	76-44-8	H2
Heptachlor epoxide	ND	ug/L	0.50	1	07/26/24 15:39	07/29/24 13:06	1024-57-3	H2
Methoxychlor	ND	ug/L	1000	1	07/26/24 15:39	07/29/24 13:06	72-43-5	H2
Toxaphene	ND	ug/L	3.0	1	07/26/24 15:39	07/29/24 13:06	8001-35-2	H2
Surrogates								
Decachlorobiphenyl (S)	163	%	19-200	1	07/26/24 15:39	07/29/24 13:06	2051-24-3	
Tetrachloro-m-xylene (S)	136	%	10-137	1	07/26/24 15:39	07/29/24 13:06	877-09-8	
9056 IC Anions								
Analytical Method: EPA 9056 Preparation Method: EPA 9056								
Pace Analytical Services - Indianapolis								
Sulfate	116	mg/kg	11.4	1	07/27/24 15:30	07/29/24 22:03	14808-79-8	N2
6010D ATL ICP								
Analytical Method: EPA 6010D Preparation Method: EPA 3050B								
Pace Analytical Services - Peachtree Corners, GA								
Calcium	94800	mg/kg	579	5	07/13/24 11:08	07/19/24 18:47	7440-70-2	
Cobalt	15.6	mg/kg	4.6	1	07/13/24 11:08	07/19/24 18:42	7440-48-4	
Manganese	21200	mg/kg	116	25	07/13/24 11:08	07/19/24 18:52	7439-96-5	
Sodium	2040	mg/kg	116	1	07/13/24 11:08	07/19/24 18:42	7440-23-5	
Zinc	84200	mg/kg	86.9	25	07/13/24 11:08	07/19/24 18:52	7440-66-6	
6010D ATL ICP, TCLP								
Analytical Method: EPA 6010D Preparation Method: EPA 3010A								
Leachate Method/Date: EPA 1311; 07/19/24 13:43 Initial pH: 8.68; Final pH: 3.59								
Pace Analytical Services - Peachtree Corners, GA								
Arsenic	ND	mg/L	0.30	1	07/20/24 14:02	07/20/24 21:03	7440-38-2	
Barium	ND	mg/L	0.50	1	07/20/24 14:02	07/20/24 21:03	7440-39-3	
Cadmium	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 21:03	7440-43-9	
Chromium	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 21:03	7440-47-3	
Lead	ND	mg/L	0.25	1	07/20/24 14:02	07/20/24 21:03	7439-92-1	
Selenium	ND	mg/L	0.40	1	07/20/24 14:02	07/20/24 21:03	7782-49-2	
Silver	ND	mg/L	0.10	1	07/20/24 14:02	07/20/24 21:03	7440-22-4	

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-5D **Lab ID: 92741256010** Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
7470 Mercury, TCLP								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Leachate Method/Date: EPA 1311; 07/19/24 13:43 Initial pH: 8.68; Final pH: 3.59								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.0050	1	07/22/24 10:00	07/22/24 13:24	7439-97-6	
7471 Mercury								
Analytical Method: EPA 7471B Preparation Method: EPA 7471B								
Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/kg	1.1	1	07/18/24 16:30	07/19/24 14:07	7439-97-6	
6010 MET ICP								
Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Pace Analytical Services - Ormond Beach								
Calcium	73300	mg/kg	285	1	07/19/24 08:51	07/20/24 05:25	7440-70-2	
Cobalt	63.8	mg/kg	2.8	1	07/19/24 08:51	07/20/24 05:25	7440-48-4	
Magnesium	82200	mg/kg	712	5	07/19/24 08:51	07/22/24 15:49	7439-95-4	
Manganese	16700	mg/kg	142	100	07/19/24 08:51	07/22/24 15:52	7439-96-5	
Sodium	2060	mg/kg	285	1	07/19/24 08:51	07/20/24 05:25	7440-23-5	
Zinc	61400	mg/kg	2850	100	07/19/24 08:51	07/22/24 15:52	7440-66-6	
7471 Mercury								
Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Pace Analytical Services - Ormond Beach								
Mercury	0.29	mg/kg	0.039	1	07/17/24 09:38	07/17/24 16:06	7439-97-6	
8270E TCLP RVE								
Analytical Method: EPA 8270E Preparation Method: EPA 3510C								
Leachate Method/Date: EPA 1311; 07/17/24 13:00 Initial pH: 5.89; Final pH: 5								
Pace Analytical Services - Charlotte								
1,4-Dichlorobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	87-68-3	
Hexachlorobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	118-74-1	
Hexachloroethane	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	15831-10-4	
Nitrobenzene	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	98-95-3	
Pentachlorophenol	ND	ug/L	100	1	07/18/24 22:32	07/19/24 14:40	87-86-5	
Pyridine	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	50.0	1	07/18/24 22:32	07/19/24 14:40	88-06-2	
Surrogates								
Nitrobenzene-d5 (S)	52	%	10-133	1	07/18/24 22:32	07/19/24 14:40	4165-60-0	
2-Fluorobiphenyl (S)	42	%	10-130	1	07/18/24 22:32	07/19/24 14:40	321-60-8	
Terphenyl-d14 (S)	101	%	10-193	1	07/18/24 22:32	07/19/24 14:40	1718-51-0	
Phenol-d6 (S)	46	%	10-130	1	07/18/24 22:32	07/19/24 14:40	13127-88-3	
2-Fluorophenol (S)	56	%	10-130	1	07/18/24 22:32	07/19/24 14:40	367-12-4	
2,4,6-Tribromophenol (S)	118	%	10-166	1	07/18/24 22:32	07/19/24 14:40	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-5D Lab ID: 92741256010 Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles		Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B Pace Analytical Services - Charlotte						
Acetone	ND	ug/kg	1190	1	07/13/24 16:14	07/14/24 12:35	67-64-1	
Benzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	71-43-2	
Bromobenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	108-86-1	
Bromochloromethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	74-97-5	
Bromodichloromethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	75-27-4	
Bromoform	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	75-25-2	
Bromomethane	ND	ug/kg	238	1	07/13/24 16:14	07/14/24 12:35	74-83-9	IH,IK
2-Butanone (MEK)	ND	ug/kg	1190	1	07/13/24 16:14	07/14/24 12:35	78-93-3	
n-Butylbenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	104-51-8	
sec-Butylbenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	135-98-8	
tert-Butylbenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	98-06-6	
Carbon tetrachloride	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	56-23-5	
Chlorobenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	108-90-7	
Chloroethane	ND	ug/kg	119	1	07/13/24 16:14	07/14/24 12:35	75-00-3	
Chloroform	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	67-66-3	
Chloromethane	ND	ug/kg	119	1	07/13/24 16:14	07/14/24 12:35	74-87-3	
2-Chlorotoluene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	95-49-8	
4-Chlorotoluene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	96-12-8	
Dibromochloromethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	106-93-4	
Dibromomethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	119	1	07/13/24 16:14	07/14/24 12:35	75-71-8	
1,1-Dichloroethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	75-34-3	
1,2-Dichloroethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	107-06-2	
1,1-Dichloroethene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	156-60-5	
1,2-Dichloropropane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	78-87-5	
1,3-Dichloropropane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	142-28-9	
2,2-Dichloropropane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	594-20-7	v2
1,1-Dichloropropene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	10061-02-6	
Diisopropyl ether	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	108-20-3	
Ethylbenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	119	1	07/13/24 16:14	07/14/24 12:35	87-68-3	
2-Hexanone	ND	ug/kg	596	1	07/13/24 16:14	07/14/24 12:35	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	98-82-8	
p-Isopropyltoluene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	99-87-6	
Methylene Chloride	ND	ug/kg	238	1	07/13/24 16:14	07/14/24 12:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	596	1	07/13/24 16:14	07/14/24 12:35	108-10-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-5D Lab ID: 92741256010 Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260D/5035A/5030B Volatiles								
Analytical Method: EPA 8260D Preparation Method: EPA 5035A/5030B								
Pace Analytical Services - Charlotte								
Methyl-tert-butyl ether	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	1634-04-4	
Naphthalene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	91-20-3	
n-Propylbenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	103-65-1	
Styrene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	79-34-5	
Tetrachloroethene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	127-18-4	
Toluene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	79-00-5	
Trichloroethene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	79-01-6	
Trichlorofluoromethane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	108-67-8	
Vinyl acetate	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	108-05-4	
Vinyl chloride	ND	ug/kg	119	1	07/13/24 16:14	07/14/24 12:35	75-01-4	
Xylene (Total)	ND	ug/kg	119	1	07/13/24 16:14	07/14/24 12:35	1330-20-7	
m&p-Xylene	ND	ug/kg	119	1	07/13/24 16:14	07/14/24 12:35	179601-23-1	
o-Xylene	ND	ug/kg	59.6	1	07/13/24 16:14	07/14/24 12:35	95-47-6	
Surrogates								
Toluene-d8 (S)	99	%	70-130	1	07/13/24 16:14	07/14/24 12:35	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1	07/13/24 16:14	07/14/24 12:35	460-00-4	
1,2-Dichloroethane-d4 (S)	90	%	70-130	1	07/13/24 16:14	07/14/24 12:35	17060-07-0	

8260D MSV TCLP

Analytical Method: EPA 8260D Leachate Method/Date: EPA 1311; 07/18/24 13:51

Pace Analytical Services - Charlotte

Benzene	ND	ug/L	100	20		07/20/24 07:58	71-43-2	
2-Butanone (MEK)	ND	ug/L	200	20		07/20/24 07:58	78-93-3	
Carbon tetrachloride	ND	ug/L	100	20		07/20/24 07:58	56-23-5	M1
Chlorobenzene	ND	ug/L	100	20		07/20/24 07:58	108-90-7	
Chloroform	ND	ug/L	100	20		07/20/24 07:58	67-66-3	M1
1,4-Dichlorobenzene	ND	ug/L	100	20		07/20/24 07:58	106-46-7	M1
1,2-Dichloroethane	ND	ug/L	100	20		07/20/24 07:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		07/20/24 07:58	75-35-4	M1, v1
Tetrachloroethene	ND	ug/L	100	20		07/20/24 07:58	127-18-4	
Trichloroethene	ND	ug/L	100	20		07/20/24 07:58	79-01-6	
Vinyl chloride	ND	ug/L	100	20		07/20/24 07:58	75-01-4	M1, v2
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	70-130	20		07/20/24 07:58	17060-07-0	
Toluene-d8 (S)	99	%	70-130	20		07/20/24 07:58	2037-26-5	
4-Bromofluorobenzene (S)	129	%	70-130	20		07/20/24 07:58	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Sludge
 Pace Project No.: 92741256

Sample: SS-5D **Lab ID: 92741256010** Collected: 07/10/24 15:00 Received: 07/11/24 09:56 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Percent Moisture								
Analytical Method: SW-846 Pace Analytical Services - Charlotte								
Percent Moisture	78.6	%	0.10	1		07/11/24 16:34		N2
1010 Flashpoint,Closed Cup								
Analytical Method: EPA 1010B Pace Analytical Services - Asheville								
Flashpoint	>200	deg F	70.0	1		07/24/24 11:34		
9045 pH Soil								
Analytical Method: EPA 9045D Pace Analytical Services - Asheville								
pH at 25 Degrees C	8.2	Std. Units	0.10	1		07/19/24 15:44		H3
353.2 Nitrogen, NO2/NO3								
Analytical Method: EPA 353.2 Rev 2.0 1993 Preparation Method: EPA 353.2 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, NO2 plus NO3	8280	mg/kg	1850	100	07/17/24 00:02	07/17/24 06:00		H1,H2
Nitrogen, Nitrate	8230	mg/kg	1850	100	07/17/24 00:02	07/17/24 06:00	14797-55-8	
Nitrogen, Nitrite	52.1	mg/kg	18.5	1	07/17/24 00:02	07/17/24 04:48	14797-65-0	H1,H2
4500 Chloride in Soil								
Analytical Method: SM 4500-Cl-E-2011 Preparation Method: SM 4500-Cl-E-2011 Pace Analytical Services - Asheville								
Chloride	1200	mg/kg	45.6	1	07/19/24 12:15	07/22/24 11:55	16887-00-6	
733C S Reactive Cyanide								
Analytical Method: EPA 9014 Preparation Method: SW-846 7.3.3.2 Pace Analytical Services - Greensburg								
Cyanide, Reactive	ND	mg/kg	4.7	1	07/15/24 20:05	07/17/24 14:50		
734S Reactive Sulfide								
Analytical Method: SM 4500-S2-F-2011 Preparation Method: SW-846 7.3.4.2 Pace Analytical Services - Greensburg								
Sulfide, Reactive	ND	mg/kg	46.6	1	07/15/24 20:05	07/15/24 20:21		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 2344257 Analysis Method: EPA 8081B
 QC Batch Method: 3510C Analysis Description: Pesticides (GC) 8081B
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples:

METHOD BLANK: R4108260-1 Matrix: Solid

Associated Lab Samples: 92741256002, 92741256009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlordane (Technical)	mg/L	ND	0.00500	08/16/24 13:54	
Endrin	mg/L	ND	0.00500	08/16/24 13:54	
gamma-BHC (Lindane)	mg/L	ND	0.00500	08/16/24 13:54	
Heptachlor	mg/L	ND	0.00500	08/16/24 13:54	
Heptachlor epoxide	mg/L	ND	0.00500	08/16/24 13:54	
Methoxychlor	mg/L	ND	0.00500	08/16/24 13:54	
Toxaphene	mg/L	ND	0.0100	08/16/24 13:54	
Decachlorobiphenyl (S)	%	75.4	10.0-128	08/16/24 13:54	
Tetrachloro-m-xylene (S)	%	101	10.0-127	08/16/24 13:54	

LABORATORY CONTROL SAMPLE: R4108260-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	mg/L	0.0100	0.0108	108	57.0-134	
gamma-BHC (Lindane)	mg/L	0.0100	0.0111	111	55.0-129	
Heptachlor	mg/L	0.0100	0.0111	111	27.0-132	
Heptachlor epoxide	mg/L	0.0100	0.0109	109	57.0-130	
Methoxychlor	mg/L	0.0100	0.0104	104	54.0-155	
Decachlorobiphenyl (S)	%			94.2	10.0-128	
Tetrachloro-m-xylene (S)	%			101	10.0-127	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4108260-3 R4108260-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		L1764177-09 Result	Spike Conc.	Spike Conc.	Result					
Endrin	mg/L	ND	0.0100	0.0100	ND	ND	101	106	10.0-160	4.83
gamma-BHC (Lindane)	mg/L	ND	0.0100	0.0100	ND	ND	84.3	89.7	14.0-141	6.21
Heptachlor	mg/L	ND	0.0100	0.0100	ND	ND	95.4	100	16.0-136	4.71
Heptachlor epoxide	mg/L	ND	0.0100	0.0100	ND	ND	97.0	104	10.0-160	6.97
Methoxychlor	mg/L	ND	0.0100	0.0100	ND	ND	90.8	100	10.0-160	9.64
Decachlorobiphenyl (S)	%						77.5	90.7	10.0-128	
Tetrachloro-m-xylene (S)	%						89.2	91.6	10.0-127	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 2334324 Analysis Method: EPA 8151A
 QC Batch Method: 8151A Analysis Description: Chlorinated Herb. (GC) 8151A
 Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 92741256001, 92741256002

METHOD BLANK: R4102837-1 Matrix: Solid

Associated Lab Samples: 92741256001, 92741256002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-TP (Silvex)	mg/L	ND	0.00200	08/03/24 18:43	
2,4-D	mg/L	ND	0.00200	08/03/24 18:43	
2,4-DCAA (S)	%	102	14.0-158	08/03/24 18:43	

LABORATORY CONTROL SAMPLE: R4102837-3

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-TP (Silvex)	mg/L	0.0250	0.0246	98.4	50.0-125	
2,4-D	mg/L	0.0250	0.0275	110	50.0-120	
2,4-DCAA (S)	%			103	14.0-158	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4102837-4 R4102837-5

Parameter	Units	R4102837-4		R4102837-5		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		L1760312-06 Result	MS Spike Conc.	MSD Spike Conc.	MS Result					
2,4,5-TP (Silvex)	mg/L	ND	0.0250	0.0250	ND	ND	90.0	105	50.0-125	15.6
2,4-D	mg/L	ND	0.0250	0.0250	ND	ND	105	123	50.0-120	15.4 MH
2,4-DCAA (S)	%						97.8	110	14.0-158	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 2335559 Analysis Method: EPA 8151A
 QC Batch Method: 8151A Analysis Description: Chlorinated Herb. (GC) 8151A
 Laboratory: Pace National - Mt. Juliet
 Associated Lab Samples: 92741256004, 92741256005, 92741256006, 92741256008, 92741256009, 92741256010

METHOD BLANK: R4103058-1 Matrix: Solid
 Associated Lab Samples: 92741256004, 92741256005, 92741256006, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4,5-TP (Silvex)	mg/L	ND	0.00200	08/05/24 14:48	
2,4-D	mg/L	ND	0.00200	08/05/24 14:48	
2,4-DCAA (S)	%	88	14.0-158	08/05/24 14:48	

LABORATORY CONTROL SAMPLE: R4103058-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4,5-TP (Silvex)	mg/L	0.0250	0.0243	97.2	50.0-125	
2,4-D	mg/L	0.0250	0.0272	109	50.0-120	
2,4-DCAA (S)	%			96.0	14.0-158	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: R4103058-3 R4103058-4

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		L1761635-02 Result	Spike Conc.	Spike Conc.	Result					
2,4,5-TP (Silvex)	mg/L	ND	0.0250	0.0250	ND	ND	79.2	83.2	50.0-125	4.93
2,4-D	mg/L	ND	0.0250	0.0250	ND	ND	91.6	94.4	50.0-120	3.01
2,4-DCAA (S)	%						80.6	79.4	14.0-158	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 801948 Analysis Method: EPA 9056
 QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions
 Laboratory: Pace Analytical Services - Indianapolis
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

METHOD BLANK: 3668735 Matrix: Solid
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/kg	ND	2.5	07/29/24 14:09	N2

LABORATORY CONTROL SAMPLE: 3668736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/kg	50	49.4	99	80-120	N2

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3668814 3668815

Parameter	92741256010		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	Units	Result									
Sulfate	mg/kg	116	225	234	221	204	47	38	80-120	8	M0,N2

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 867898 Analysis Method: EPA 6010D
 QC Batch Method: EPA 3050B Analysis Description: 6010D ATL
 Laboratory: Pace Analytical Services - Peachtree Corners, GA
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009

METHOD BLANK: 4473578 Matrix: Solid
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/kg	ND	90.9	07/16/24 16:46	
Cobalt	mg/kg	ND	3.6	07/16/24 16:46	
Manganese	mg/kg	ND	3.6	07/16/24 16:46	
Sodium	mg/kg	ND	90.9	07/16/24 16:46	
Zinc	mg/kg	ND	2.7	07/16/24 16:46	

LABORATORY CONTROL SAMPLE: 4473579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/kg	92.6	92.8	100	80-120	
Cobalt	mg/kg	92.6	83.6	90	80-120	
Manganese	mg/kg	92.6	87.2	94	80-120	
Sodium	mg/kg	92.6	79.9J	86	80-120	
Zinc	mg/kg	92.6	83.0	90	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4473580 4473581

Parameter	Units	92741256001		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec				
Calcium	mg/kg	105000	78.9	78.2	106000	158000	632	67500	75-125	40		
Cobalt	mg/kg	62.6	78.9	78.2	137	134	95	91	75-125	3		
Manganese	mg/kg	30500	78.9	78.2	30100	36600	-485	7890	75-125	20		
Sodium	mg/kg	1850	78.9	78.2	1930	1870	102	20	75-125	3		
Zinc	mg/kg	61700	78.9	78.2	61100	63800	-731	2740	75-125	4		

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 868030	Analysis Method: EPA 6010D
QC Batch Method: EPA 3050B	Analysis Description: 6010D ATL
	Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92741256010

METHOD BLANK: 4474439 Matrix: Solid

Associated Lab Samples: 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/kg	ND	92.6	07/17/24 18:28	
Cobalt	mg/kg	ND	3.7	07/17/24 18:28	
Manganese	mg/kg	ND	3.7	07/17/24 18:28	
Sodium	mg/kg	ND	92.6	07/17/24 18:28	
Zinc	mg/kg	ND	2.8	07/20/24 16:29	

LABORATORY CONTROL SAMPLE: 4474440

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/kg	94.3	108	114	80-120	
Cobalt	mg/kg	94.3	85.9	91	80-120	
Manganese	mg/kg	94.3	86.7	92	80-120	
Sodium	mg/kg	94.3	91.1J	97	80-120	
Zinc	mg/kg	94.3	90.0	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4474441 4474442

Parameter	Units	92740647001		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
Calcium	mg/kg		113	120	362	397	85	110	75-125	9		
Cobalt	mg/kg		113	120	106	112	93	92	75-125	5		
Manganese	mg/kg		113	120	127	134	90	91	75-125	6		
Sodium	mg/kg		113	120	120	128	102	103	75-125	6		
Zinc	mg/kg		113	120	110	122	93	97	75-125	10		

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869696 Analysis Method: EPA 6010D
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL TCLP
 Laboratory: Pace Analytical Services - Peachtree Corners, GA
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007

METHOD BLANK: 4480042 Matrix: Water
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.30	07/20/24 18:38	
Barium	mg/L	ND	0.50	07/20/24 18:38	
Cadmium	mg/L	ND	0.10	07/20/24 18:38	
Chromium	mg/L	ND	0.10	07/20/24 18:38	
Lead	mg/L	ND	0.25	07/20/24 18:38	
Selenium	mg/L	ND	0.40	07/20/24 18:38	
Silver	mg/L	ND	0.10	07/20/24 18:38	

LABORATORY CONTROL SAMPLE: 4482615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	10	8.7	87	80-120	
Barium	mg/L	10	9.1	91	80-120	
Cadmium	mg/L	10	9.1	91	80-120	
Chromium	mg/L	10	8.9	89	80-120	
Lead	mg/L	10	8.5	85	80-120	
Selenium	mg/L	10	8.7	87	80-120	
Silver	mg/L	10	8.9	89	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4482613 4482614

Parameter	Units	92740422002		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Arsenic	mg/L	ND	10	10	9.8	9.8	98	98	75-125	0				
Barium	mg/L	0.54	10	10	10.4	10.3	99	98	75-125	1				
Cadmium	mg/L	ND	10	10	9.9	9.8	99	98	75-125	1				
Chromium	mg/L	ND	10	10	9.7	9.7	97	97	75-125	0				
Lead	mg/L	2.7	10	10	12.2	12.3	95	96	75-125	1				
Selenium	mg/L	ND	10	10	9.7	9.7	97	96	75-125	0				
Silver	mg/L	ND	10	10	9.6	9.4	96	94	75-125	2				

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869796 Analysis Method: EPA 6010D
 QC Batch Method: EPA 3010A Analysis Description: 6010D ATL TCLP
 Laboratory: Pace Analytical Services - Peachtree Corners, GA
 Associated Lab Samples: 92741256008, 92741256009, 92741256010

METHOD BLANK: 4481404 Matrix: Water
 Associated Lab Samples: 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.30	07/20/24 20:31	
Barium	mg/L	ND	0.50	07/20/24 20:31	
Cadmium	mg/L	ND	0.10	07/20/24 20:31	
Chromium	mg/L	ND	0.10	07/20/24 20:31	
Lead	mg/L	ND	0.25	07/20/24 20:31	
Selenium	mg/L	ND	0.40	07/20/24 20:31	
Silver	mg/L	ND	0.10	07/20/24 20:31	

LABORATORY CONTROL SAMPLE: 4483230

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	10	9.9	99	80-120	
Barium	mg/L	10	10	100	80-120	
Cadmium	mg/L	10	10.0	100	80-120	
Chromium	mg/L	10	9.8	98	80-120	
Lead	mg/L	10	9.8	98	80-120	
Selenium	mg/L	10	9.8	98	80-120	
Silver	mg/L	10	9.7	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4483231 4483232

Parameter	92741256008		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
Arsenic	mg/L	ND	10	10	10.2	10.0	102	100	75-125	2			
Barium	mg/L	ND	10	10	9.9	9.9	98	98	75-125	0			
Cadmium	mg/L	ND	10	10	9.8	9.7	98	97	75-125	0			
Chromium	mg/L	ND	10	10	9.8	9.8	98	98	75-125	0			
Lead	mg/L	ND	10	10	9.8	9.6	98	96	75-125	2			
Selenium	mg/L	ND	10	10	10.2	10.1	99	99	75-125	1			
Silver	mg/L	ND	10	10	9.4	9.3	94	93	75-125	1			

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869464 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury TCLP, ATL
 Laboratory: Pace Analytical Services - Peachtree Corners, GA
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007

METHOD BLANK: 4480042 Matrix: Water
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0050	07/19/24 10:43	

LABORATORY CONTROL SAMPLE: 4481361

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.017	0.015	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4481359 4481360

Parameter	Units	92741256001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	MSD Result	MSD Spike Conc.					
Mercury	mg/L	ND	0.017	0.017	0.013	0.014	78	86	75-125	10	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869934 Analysis Method: EPA 7470A
 QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury TCLP, ATL
 Laboratory: Pace Analytical Services - Peachtree Corners, GA
 Associated Lab Samples: 92741256008, 92741256009, 92741256010

METHOD BLANK: 4481404 Matrix: Water
 Associated Lab Samples: 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0050	07/22/24 13:13	

LABORATORY CONTROL SAMPLE: 4483576

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.017	0.016	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4483577 4483578

Parameter	Units	92742143001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result					
Mercury	mg/L	ND	0.017	0.017	0.016	0.016	96	99	75-125	3	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869319 Analysis Method: EPA 7471B
 QC Batch Method: EPA 7471B Analysis Description: 7471 Mercury
 Laboratory: Pace Analytical Services - Peachtree Corners, GA
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

METHOD BLANK: 4480578 Matrix: Solid
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.24	07/19/24 12:44	

LABORATORY CONTROL SAMPLE: 4480579

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.33	0.32	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4480580 4480581

Parameter	Units	92741784001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Mercury	mg/kg	ND	0.36	0.34	0.36	0.31	96	87	75-125	15	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 1026805 Analysis Method: EPA 7471
 QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
 Laboratory: Pace Analytical Services - Ormond Beach
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

METHOD BLANK: 5643961 Matrix: Solid
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.0086	07/17/24 15:27	

LABORATORY CONTROL SAMPLE: 5643962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	0.083	0.077	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5643963 5643964

Parameter	92741256007		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	Units	Result									
Mercury	mg/kg	0.10	0.293	0.317	0.37	0.36	91	82	80-120	3	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 1027180 Analysis Method: EPA 6010
 QC Batch Method: EPA 3050 Analysis Description: 6010 MET Solid
 Laboratory: Pace Analytical Services - Ormond Beach
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005

METHOD BLANK: 5646200 Matrix: Solid
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/kg	ND	46.4	07/18/24 21:48	
Cobalt	mg/kg	ND	0.46	07/18/24 21:48	
Magnesium	mg/kg	ND	23.2	07/18/24 21:48	
Manganese	mg/kg	ND	0.23	07/18/24 21:48	
Sodium	mg/kg	ND	46.4	07/18/24 21:48	
Zinc	mg/kg	ND	4.6	07/18/24 21:48	

LABORATORY CONTROL SAMPLE: 5646201

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/kg	657	705	107	80-120	
Cobalt	mg/kg	13.1	13.3	101	80-120	
Magnesium	mg/kg	657	653	99	80-120	
Manganese	mg/kg	13.1	13.4	102	80-120	
Sodium	mg/kg	657	674	103	80-120	
Zinc	mg/kg	65.7	65.7	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5646202 5646203

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		35890642001 Result	Spike Conc.	Spike Conc.	MS Result					
Calcium	mg/kg	2650	703	637	5650	7240	426	721	75-125	25 M1,R1
Cobalt	mg/kg	0.073J	14.1	12.8	13.8	13.0	98	101	75-125	6
Magnesium	mg/kg	31.1	703	637	746	727	102	109	75-125	3
Manganese	mg/kg	3.6	14.1	12.8	19.8	19.2	115	122	75-125	4
Sodium	mg/kg	26.1U	703	637	711	684	100	106	75-125	4
Zinc	mg/kg	1.9U	70.3	63.7	68.5	64.9	97	102	75-125	5

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 1027530 Analysis Method: EPA 6010
 QC Batch Method: EPA 3050 Analysis Description: 6010 MET Solid
 Laboratory: Pace Analytical Services - Ormond Beach
 Associated Lab Samples: 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

METHOD BLANK: 5647907 Matrix: Solid
 Associated Lab Samples: 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	mg/kg	ND	53.3	07/19/24 20:03	
Cobalt	mg/kg	ND	0.53	07/19/24 20:03	
Magnesium	mg/kg	ND	26.7	07/19/24 20:03	
Manganese	mg/kg	ND	0.27	07/19/24 20:03	
Sodium	mg/kg	ND	53.3	07/19/24 20:03	
Zinc	mg/kg	ND	5.3	07/19/24 20:03	

LABORATORY CONTROL SAMPLE: 5647908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/kg	615	635	103	80-120	
Cobalt	mg/kg	12.3	12.6	102	80-120	
Magnesium	mg/kg	615	614	100	80-120	
Manganese	mg/kg	12.3	13.0	106	80-120	
Sodium	mg/kg	615	622	101	80-120	
Zinc	mg/kg	61.5	61.5	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5647909 5647910

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		35891484001 Result	Spike Conc.	Spike Conc.	MS Result					
Calcium	mg/kg	41300	4250	4320	46400	45000	122	86	75-125	3
Cobalt	mg/kg	3.6	85.2	86.5	87.0	88.7	98	98	75-125	2
Magnesium	mg/kg	3520	4250	4320	7960	7890	104	101	75-125	1
Manganese	mg/kg	73.6	85.2	86.5	162	158	104	98	75-125	2
Sodium	mg/kg	797	4250	4320	5160	5200	103	102	75-125	1
Zinc	mg/kg	933	425	432	1340	1340	96	93	75-125	1

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QUALITY CONTROL DATA

Project: Sludge
Pace Project No.: 92741256

QC Batch: 868084 Analysis Method: EPA 8260D
QC Batch Method: EPA 5035A/5030B Analysis Description: 8260D 5035A 5030B
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

METHOD BLANK: 4474585 Matrix: Solid
Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

Table with 6 columns: Parameter, Units, Blank Result, Reporting Limit, Analyzed, Qualifiers. Lists various chemical compounds and their detection results.

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

METHOD BLANK: 4474585 Matrix: Solid
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/14/24 04:44	
Dibromochloromethane	ug/kg	ND	5.0	07/14/24 04:44	
Dibromomethane	ug/kg	ND	5.0	07/14/24 04:44	
Dichlorodifluoromethane	ug/kg	ND	10.0	07/14/24 04:44	
Diisopropyl ether	ug/kg	ND	5.0	07/14/24 04:44	
Ethylbenzene	ug/kg	ND	5.0	07/14/24 04:44	
Hexachloro-1,3-butadiene	ug/kg	ND	10.0	07/14/24 04:44	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	07/14/24 04:44	
m&p-Xylene	ug/kg	ND	10.0	07/14/24 04:44	
Methyl-tert-butyl ether	ug/kg	ND	5.0	07/14/24 04:44	
Methylene Chloride	ug/kg	ND	20.0	07/14/24 04:44	
n-Butylbenzene	ug/kg	ND	5.0	07/14/24 04:44	
n-Propylbenzene	ug/kg	ND	5.0	07/14/24 04:44	
Naphthalene	ug/kg	ND	5.0	07/14/24 04:44	
o-Xylene	ug/kg	ND	5.0	07/14/24 04:44	
p-Isopropyltoluene	ug/kg	ND	5.0	07/14/24 04:44	
sec-Butylbenzene	ug/kg	ND	5.0	07/14/24 04:44	
Styrene	ug/kg	ND	5.0	07/14/24 04:44	
tert-Butylbenzene	ug/kg	ND	5.0	07/14/24 04:44	
Tetrachloroethene	ug/kg	ND	5.0	07/14/24 04:44	
Toluene	ug/kg	ND	5.0	07/14/24 04:44	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/14/24 04:44	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/14/24 04:44	
Trichloroethene	ug/kg	ND	5.0	07/14/24 04:44	
Trichlorofluoromethane	ug/kg	ND	5.0	07/14/24 04:44	
Vinyl acetate	ug/kg	ND	50.0	07/14/24 04:44	
Vinyl chloride	ug/kg	ND	10.0	07/14/24 04:44	
Xylene (Total)	ug/kg	ND	10.0	07/14/24 04:44	
1,2-Dichloroethane-d4 (S)	%	95	70-130	07/14/24 04:44	
4-Bromofluorobenzene (S)	%	103	70-130	07/14/24 04:44	
Toluene-d8 (S)	%	99	70-130	07/14/24 04:44	

LABORATORY CONTROL SAMPLE: 4474586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	500	450	90	70-130	
1,1,1-Trichloroethane	ug/kg	500	439	88	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	500	413	83	70-130	
1,1,2-Trichloroethane	ug/kg	500	446	89	70-130	
1,1-Dichloroethane	ug/kg	500	446	89	70-130	
1,1-Dichloroethene	ug/kg	500	445	89	70-132	
1,1-Dichloropropene	ug/kg	500	426	85	70-130	
1,2,3-Trichlorobenzene	ug/kg	500	477	95	62-136	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

LABORATORY CONTROL SAMPLE: 4474586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,3-Trichloropropane	ug/kg	500	406	81	70-130	
1,2,4-Trichlorobenzene	ug/kg	500	447	89	70-130	
1,2,4-Trimethylbenzene	ug/kg	500	446	89	70-130	
1,2-Dibromo-3-chloropropane	ug/kg	500	429	86	65-130	
1,2-Dibromoethane (EDB)	ug/kg	500	440	88	70-130	
1,2-Dichlorobenzene	ug/kg	500	486	97	70-130	
1,2-Dichloroethane	ug/kg	500	421	84	70-130	
1,2-Dichloropropane	ug/kg	500	453	91	70-130	
1,3,5-Trimethylbenzene	ug/kg	500	441	88	70-130	
1,3-Dichlorobenzene	ug/kg	500	437	87	70-130	
1,3-Dichloropropane	ug/kg	500	423	85	70-130	
1,4-Dichlorobenzene	ug/kg	500	432	86	70-130	
2,2-Dichloropropane	ug/kg	500	359	72	60-130 v3	
2-Butanone (MEK)	ug/kg	1000	774	77	66-130	
2-Chlorotoluene	ug/kg	500	442	88	70-130	
2-Hexanone	ug/kg	1000	794	79	68-130	
4-Chlorotoluene	ug/kg	500	443	89	70-130	
4-Methyl-2-pentanone (MIBK)	ug/kg	1000	839	84	70-130	
Acetone	ug/kg	1000	815	81	60-130	
Benzene	ug/kg	500	457	91	70-130	
Bromobenzene	ug/kg	500	453	91	70-130	
Bromochloromethane	ug/kg	500	459	92	70-130	
Bromodichloromethane	ug/kg	500	450	90	70-130	
Bromoform	ug/kg	500	458	92	70-130	
Bromomethane	ug/kg	500	520	104	43-175 IH,IK	
Carbon tetrachloride	ug/kg	500	499	100	70-130	
Chlorobenzene	ug/kg	500	441	88	70-130	
Chloroethane	ug/kg	500	453	91	70-145	
Chloroform	ug/kg	500	429	86	70-130	
Chloromethane	ug/kg	500	515	103	66-146	
cis-1,2-Dichloroethene	ug/kg	500	437	87	70-130	
cis-1,3-Dichloropropene	ug/kg	500	427	85	70-130	
Dibromochloromethane	ug/kg	500	459	92	70-130	
Dibromomethane	ug/kg	500	502	100	70-130	
Dichlorodifluoromethane	ug/kg	500	436	87	42-197	
Diisopropyl ether	ug/kg	500	429	86	68-130	
Ethylbenzene	ug/kg	500	472	94	70-130	
Hexachloro-1,3-butadiene	ug/kg	500	477	95	70-130	
Isopropylbenzene (Cumene)	ug/kg	500	452	90	70-130	
m&p-Xylene	ug/kg	1000	884	88	70-130	
Methyl-tert-butyl ether	ug/kg	500	415	83	70-130	
Methylene Chloride	ug/kg	500	424	85	65-130	
n-Butylbenzene	ug/kg	500	411	82	70-130	
n-Propylbenzene	ug/kg	500	426	85	70-130	
Naphthalene	ug/kg	500	451	90	65-135	
o-Xylene	ug/kg	500	456	91	70-130	
p-Isopropyltoluene	ug/kg	500	465	93	70-130	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

LABORATORY CONTROL SAMPLE: 4474586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
sec-Butylbenzene	ug/kg	500	441	88	70-130	
Styrene	ug/kg	500	459	92	70-130	
tert-Butylbenzene	ug/kg	500	458	92	70-130	
Tetrachloroethene	ug/kg	500	462	92	70-130	
Toluene	ug/kg	500	451	90	70-130	
trans-1,2-Dichloroethene	ug/kg	500	447	89	70-130	
trans-1,3-Dichloropropene	ug/kg	500	420	84	70-130	
Trichloroethene	ug/kg	500	480	96	70-130	
Trichlorofluoromethane	ug/kg	500	473	95	62-140	
Vinyl acetate	ug/kg	1000	901	90	70-140	
Vinyl chloride	ug/kg	500	522	104	70-152	
Xylene (Total)	ug/kg	1500	1340	89	70-130	
1,2-Dichloroethane-d4 (S)	%			91	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE SAMPLE: 4474587

Parameter	Units	92741701002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	477	472	99	22-166	
1,1,1-Trichloroethane	ug/kg	ND	477	476	100	23-172	
1,1,2,2-Tetrachloroethane	ug/kg	ND	477	404	85	21-158	
1,1,2-Trichloroethane	ug/kg	ND	477	464	97	25-160	
1,1-Dichloroethane	ug/kg	ND	477	458	96	22-166	
1,1-Dichloroethene	ug/kg	ND	477	458	96	18-183	
1,1-Dichloropropene	ug/kg	ND	477	457	96	20-181	
1,2,3-Trichlorobenzene	ug/kg	ND	477	524	110	10-161	
1,2,3-Trichloropropane	ug/kg	ND	477	388	81	21-147	
1,2,4-Trichlorobenzene	ug/kg	ND	477	489	103	10-159	
1,2,4-Trimethylbenzene	ug/kg	ND	477	483	101	17-170	
1,2-Dibromo-3-chloropropane	ug/kg	ND	477	432	91	10-135	
1,2-Dibromoethane (EDB)	ug/kg	ND	477	451	95	30-154	
1,2-Dichlorobenzene	ug/kg	ND	477	512	108	26-162	
1,2-Dichloroethane	ug/kg	ND	477	417	88	23-161	
1,2-Dichloropropane	ug/kg	ND	477	470	99	29-165	
1,3,5-Trimethylbenzene	ug/kg	ND	477	486	102	20-172	
1,3-Dichlorobenzene	ug/kg	ND	477	465	98	22-164	
1,3-Dichloropropane	ug/kg	ND	477	430	90	27-156	
1,4-Dichlorobenzene	ug/kg	ND	477	456	96	20-161	
2,2-Dichloropropane	ug/kg	ND	477	361	76	10-159	v3
2-Butanone (MEK)	ug/kg	ND	953	737	77	13-143	
2-Chlorotoluene	ug/kg	ND	477	470	99	21-166	
2-Hexanone	ug/kg	ND	953	720	76	19-145	
4-Chlorotoluene	ug/kg	ND	477	473	99	19-163	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	953	786	83	21-151	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

MATRIX SPIKE SAMPLE: 4474587		92741701002	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Acetone	ug/kg	ND	953	709	74	10-133	
Benzene	ug/kg	ND	477	497	104	29-156	
Bromobenzene	ug/kg	ND	477	474	100	25-161	
Bromochloromethane	ug/kg	ND	477	484	102	27-158	
Bromodichloromethane	ug/kg	ND	477	466	98	23-158	
Bromoform	ug/kg	ND	477	446	94	19-152	
Bromomethane	ug/kg	ND	477	162	34	10-152	IH,IK
Carbon tetrachloride	ug/kg	ND	477	553	116	18-172	
Chlorobenzene	ug/kg	ND	477	464	97	26-166	
Chloroethane	ug/kg	ND	477	68.9	14	10-130	
Chloroform	ug/kg	ND	477	453	95	25-161	
Chloromethane	ug/kg	ND	477	563	118	27-197	
cis-1,2-Dichloroethene	ug/kg	ND	477	454	95	28-165	
cis-1,3-Dichloropropene	ug/kg	ND	477	437	92	23-159	
Dibromochloromethane	ug/kg	ND	477	461	97	21-151	
Dibromomethane	ug/kg	ND	477	522	109	38-158	
Dichlorodifluoromethane	ug/kg	ND	477	474	100	10-200	
Diisopropyl ether	ug/kg	ND	477	430	90	23-160	
Ethylbenzene	ug/kg	ND	477	508	107	22-163	
Hexachloro-1,3-butadiene	ug/kg	ND	477	637	134	10-192	
Isopropylbenzene (Cumene)	ug/kg	ND	477	493	104	24-173	
m&p-Xylene	ug/kg	ND	953	943	99	22-171	
Methyl-tert-butyl ether	ug/kg	ND	477	420	88	25-153	
Methylene Chloride	ug/kg	ND	477	416	87	10-165	
n-Butylbenzene	ug/kg	ND	477	456	96	10-186	
n-Propylbenzene	ug/kg	ND	477	462	97	16-171	
Naphthalene	ug/kg	ND	477	462	97	10-159	
o-Xylene	ug/kg	ND	477	484	102	23-171	
p-Isopropyltoluene	ug/kg	ND	477	526	110	13-184	
sec-Butylbenzene	ug/kg	ND	477	496	104	16-182	
Styrene	ug/kg	ND	477	480	101	25-169	
tert-Butylbenzene	ug/kg	ND	477	384	81	20-174	
Tetrachloroethene	ug/kg	ND	477	472	99	14-171	
Toluene	ug/kg	ND	477	488	102	24-166	
trans-1,2-Dichloroethene	ug/kg	ND	477	454	95	24-170	
trans-1,3-Dichloropropene	ug/kg	ND	477	422	88	22-157	
Trichloroethene	ug/kg	ND	477	529	111	23-176	
Trichlorofluoromethane	ug/kg	ND	477	94.4	20	10-138	
Vinyl acetate	ug/kg	ND	953	505	53	11-166	
Vinyl chloride	ug/kg	ND	477	564	118	21-200	
Xylene (Total)	ug/kg	ND	1430	1430	100	23-170	
1,2-Dichloroethane-d4 (S)	%				87	70-130	
4-Bromofluorobenzene (S)	%				99	70-130	
Toluene-d8 (S)	%				99	70-130	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

SAMPLE DUPLICATE: 4474588

Parameter	Units	92741701003 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND		
1,1-Dichloroethene	ug/kg	ND	ND		
1,1-Dichloropropene	ug/kg	ND	ND		
1,2,3-Trichlorobenzene	ug/kg	ND	ND		
1,2,3-Trichloropropane	ug/kg	ND	ND		
1,2,4-Trichlorobenzene	ug/kg	ND	ND		
1,2,4-Trimethylbenzene	ug/kg	ND	ND		
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		
1,2-Dichlorobenzene	ug/kg	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND		
1,3,5-Trimethylbenzene	ug/kg	ND	ND		
1,3-Dichlorobenzene	ug/kg	ND	ND		
1,3-Dichloropropane	ug/kg	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND		
2,2-Dichloropropane	ug/kg	ND	ND		v2
2-Butanone (MEK)	ug/kg	ND	ND		
2-Chlorotoluene	ug/kg	ND	ND		
2-Hexanone	ug/kg	ND	ND		
4-Chlorotoluene	ug/kg	ND	ND		
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		
Acetone	ug/kg	ND	ND		
Benzene	ug/kg	ND	ND		
Bromobenzene	ug/kg	ND	ND		
Bromochloromethane	ug/kg	ND	ND		
Bromodichloromethane	ug/kg	ND	ND		
Bromoform	ug/kg	ND	ND		
Bromomethane	ug/kg	ND	ND		IH,IK
Carbon tetrachloride	ug/kg	ND	ND		
Chlorobenzene	ug/kg	ND	ND		
Chloroethane	ug/kg	ND	ND		
Chloroform	ug/kg	ND	ND		
Chloromethane	ug/kg	ND	ND		
cis-1,2-Dichloroethene	ug/kg	ND	ND		
cis-1,3-Dichloropropene	ug/kg	ND	ND		
Dibromochloromethane	ug/kg	ND	ND		
Dibromomethane	ug/kg	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND		
Diisopropyl ether	ug/kg	ND	ND		
Ethylbenzene	ug/kg	ND	ND		
Hexachloro-1,3-butadiene	ug/kg	ND	ND		
Isopropylbenzene (Cumene)	ug/kg	ND	ND		

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QUALITY CONTROL DATA

Project: Sludge
Pace Project No.: 92741256

SAMPLE DUPLICATE: 4474588

Parameter	Units	92741701003 Result	Dup Result	RPD	Qualifiers
m&p-Xylene	ug/kg	ND	ND		
Methyl-tert-butyl ether	ug/kg	ND	ND		
Methylene Chloride	ug/kg	ND	ND		
n-Butylbenzene	ug/kg	ND	ND		
n-Propylbenzene	ug/kg	ND	ND		
Naphthalene	ug/kg	ND	ND		
o-Xylene	ug/kg	ND	ND		
p-Isopropyltoluene	ug/kg	ND	ND		
sec-Butylbenzene	ug/kg	ND	ND		
Styrene	ug/kg	ND	ND		
tert-Butylbenzene	ug/kg	ND	ND		
Tetrachloroethene	ug/kg	ND	ND		
Toluene	ug/kg	ND	ND		
trans-1,2-Dichloroethene	ug/kg	ND	ND		
trans-1,3-Dichloropropene	ug/kg	ND	ND		
Trichloroethene	ug/kg	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND		
Vinyl acetate	ug/kg	ND	ND		
Vinyl chloride	ug/kg	ND	ND		
Xylene (Total)	ug/kg	ND	ND		
1,2-Dichloroethane-d4 (S)	%	88	86		
4-Bromofluorobenzene (S)	%	101	101		
Toluene-d8 (S)	%	98	99		

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869222 Analysis Method: EPA 8260D
 QC Batch Method: EPA 8260D Analysis Description: 8260D MSV TCLP
 Laboratory: Pace Analytical Services - Charlotte
 Associated Lab Samples: 92741256001, 92741256002, 92741256003

METHOD BLANK: 4479962 Matrix: Water
 Associated Lab Samples: 92741256001, 92741256002, 92741256003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	5.0	07/18/24 11:48	
1,2-Dichloroethane	ug/L	ND	5.0	07/18/24 11:48	
1,4-Dichlorobenzene	ug/L	ND	5.0	07/18/24 11:48	
2-Butanone (MEK)	ug/L	ND	10.0	07/18/24 11:48	
Benzene	ug/L	ND	5.0	07/18/24 11:48	
Carbon tetrachloride	ug/L	ND	5.0	07/18/24 11:48	
Chlorobenzene	ug/L	ND	5.0	07/18/24 11:48	
Chloroform	ug/L	ND	5.0	07/18/24 11:48	
Tetrachloroethene	ug/L	ND	5.0	07/18/24 11:48	
Trichloroethene	ug/L	ND	5.0	07/18/24 11:48	
Vinyl chloride	ug/L	ND	5.0	07/18/24 11:48	
1,2-Dichloroethane-d4 (S)	%	111	70-130	07/18/24 11:48	
4-Bromofluorobenzene (S)	%	105	70-130	07/18/24 11:48	
Toluene-d8 (S)	%	103	70-130	07/18/24 11:48	

LABORATORY CONTROL SAMPLE: 4479961

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	20	22.2	111	69-131	
1,2-Dichloroethane	ug/L	20	23.4	117	70-130	
1,4-Dichlorobenzene	ug/L	20	16.7	84	70-130	
2-Butanone (MEK)	ug/L	40	39.7	99	67-133	
Benzene	ug/L	20	20.3	101	70-130	
Carbon tetrachloride	ug/L	20	21.3	106	70-130	
Chlorobenzene	ug/L	20	17.4	87	70-130	
Chloroform	ug/L	20	19.5	98	70-130	
Tetrachloroethene	ug/L	20	19.1	96	70-130	
Trichloroethene	ug/L	20	20.5	102	70-130	
Vinyl chloride	ug/L	20	21.4	107	66-140	
1,2-Dichloroethane-d4 (S)	%			99	70-130	
4-Bromofluorobenzene (S)	%			105	70-130	
Toluene-d8 (S)	%			101	70-130	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

Parameter	92741578016		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec					
1,1-Dichloroethene	ug/L	ND	20	20	ND	ND	129	104	64-162				
1,2-Dichloroethane	ug/L	ND	20	20	ND	26.4J	88	132	68-145				
1,4-Dichlorobenzene	ug/L	ND	20	20	ND	ND	109	112	70-140				
2-Butanone (MEK)	ug/L	ND	40	40	ND	ND	146	133	57-156				
Benzene	ug/L	ND	20	20	ND	ND	112	111	68-144				
Carbon tetrachloride	ug/L	ND	20	20	ND	ND	123	90	70-147				
Chlorobenzene	ug/L	ND	20	20	ND	ND	112	98	70-143				
Chloroform	ug/L	ND	20	20	ND	ND	118	103	67-148				
Tetrachloroethene	ug/L	ND	20	20	ND	ND	80	87	70-145				
Trichloroethene	ug/L	ND	20	20	ND	ND	103	84	70-152				
Vinyl chloride	ug/L	ND	20	20	ND	ND	98	97	51-178				
1,2-Dichloroethane-d4 (S)	%						98	101	70-130				
4-Bromofluorobenzene (S)	%						103	102	70-130				
Toluene-d8 (S)	%						101	106	70-130				

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869588 Analysis Method: EPA 8260D
 QC Batch Method: EPA 8260D Analysis Description: 8260D MSV TCLP
 Laboratory: Pace Analytical Services - Charlotte
 Associated Lab Samples: 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

METHOD BLANK: 4481738 Matrix: Water
 Associated Lab Samples: 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	5.0	07/19/24 22:42	
1,2-Dichloroethane	ug/L	ND	5.0	07/19/24 22:42	
1,4-Dichlorobenzene	ug/L	ND	5.0	07/19/24 22:42	
2-Butanone (MEK)	ug/L	ND	10.0	07/19/24 22:42	
Benzene	ug/L	ND	5.0	07/19/24 22:42	
Carbon tetrachloride	ug/L	ND	5.0	07/19/24 22:42	
Chlorobenzene	ug/L	ND	5.0	07/19/24 22:42	
Chloroform	ug/L	ND	5.0	07/19/24 22:42	
Tetrachloroethene	ug/L	ND	5.0	07/19/24 22:42	
Trichloroethene	ug/L	ND	5.0	07/19/24 22:42	
Vinyl chloride	ug/L	ND	5.0	07/19/24 22:42	v2
1,2-Dichloroethane-d4 (S)	%	96	70-130	07/19/24 22:42	
4-Bromofluorobenzene (S)	%	116	70-130	07/19/24 22:42	
Toluene-d8 (S)	%	81	70-130	07/19/24 22:42	

LABORATORY CONTROL SAMPLE: 4481737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	20	15.6	78	69-131	
1,2-Dichloroethane	ug/L	20	20.2	101	70-130	
1,4-Dichlorobenzene	ug/L	20	17.4	87	70-130	
2-Butanone (MEK)	ug/L	40	40.2	100	67-133	
Benzene	ug/L	20	17.8	89	70-130	
Carbon tetrachloride	ug/L	20	18.3	91	70-130	
Chlorobenzene	ug/L	20	19.0	95	70-130	
Chloroform	ug/L	20	15.4	77	70-130	
Tetrachloroethene	ug/L	20	18.4	92	70-130	
Trichloroethene	ug/L	20	19.8	99	70-130	
Vinyl chloride	ug/L	20	15.5	78	66-140	v3
1,2-Dichloroethane-d4 (S)	%			100	70-130	
4-Bromofluorobenzene (S)	%			94	70-130	
Toluene-d8 (S)	%			87	70-130	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

Parameter	92741256010		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
1,1-Dichloroethene	ug/L	ND	20	20	ND	ND	95	62	64-162			M1, v1	
1,2-Dichloroethane	ug/L	ND	20	20	ND	ND	105	80	68-145				
1,4-Dichlorobenzene	ug/L	ND	20	20	ND	ND	148	119	70-140			M1	
2-Butanone (MEK)	ug/L	ND	40	40	ND	ND	123	81	57-156				
Benzene	ug/L	ND	20	20	ND	ND	97	83	68-144				
Carbon tetrachloride	ug/L	ND	20	20	ND	ND	71	64	70-147			M1	
Chlorobenzene	ug/L	ND	20	20	ND	ND	119	115	70-143				
Chloroform	ug/L	ND	20	20	ND	ND	109	63	67-148			M1	
Tetrachloroethene	ug/L	ND	20	20	ND	ND	92	77	70-145				
Trichloroethene	ug/L	ND	20	20	ND	ND	93	74	70-152				
Vinyl chloride	ug/L	ND	20	20	ND	ND	62	48	51-178			M1, v2	
1,2-Dichloroethane-d4 (S)	%						97	91	70-130				
4-Bromofluorobenzene (S)	%						95	96	70-130				
Toluene-d8 (S)	%						100	102	70-130				

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 871038 Analysis Method: EPA 8081B
 QC Batch Method: EPA 3510C Analysis Description: 8081 TCLP Pesticides RV
 Laboratory: Pace Analytical Services - Charlotte
 Associated Lab Samples: 92741256001, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256010

METHOD BLANK: 4486194 Matrix: Water
 Associated Lab Samples: 92741256001, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chlordane (Technical)	ug/L	ND	3.0	07/29/24 13:33	
Endrin	ug/L	ND	0.50	07/29/24 13:33	
gamma-BHC (Lindane)	ug/L	ND	0.50	07/29/24 13:33	
Heptachlor	ug/L	ND	0.50	07/29/24 13:33	
Heptachlor epoxide	ug/L	ND	0.50	07/29/24 13:33	
Methoxychlor	ug/L	ND	1000	07/29/24 13:33	
Toxaphene	ug/L	ND	3.0	07/29/24 13:33	
Decachlorobiphenyl (S)	%	83	19-200	07/29/24 13:33	
Tetrachloro-m-xylene (S)	%	92	10-137	07/29/24 13:33	

LABORATORY CONTROL SAMPLE: 4488550

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Endrin	ug/L	1.2	1.2	94	33-190	
gamma-BHC (Lindane)	ug/L	1.2	1.1	87	32-148	
Heptachlor	ug/L	1.2	1.1	92	32-149	
Heptachlor epoxide	ug/L	1.2	1.1	87	37-149	
Methoxychlor	ug/L	3.8	3.6J	96	35-171	
Decachlorobiphenyl (S)	%			89	19-200	
Tetrachloro-m-xylene (S)	%			82	10-137	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4488551 4488552

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		92743404001 Result	Spike Conc.	Spike Conc.	MS Result					
Endrin	ug/L	ND	1.2	1.2	1.9	1.8	151	147	10-200	3
gamma-BHC (Lindane)	ug/L	ND	1.2	1.2	2.0	1.9	156	150	13-163	4
Heptachlor	ug/L	ND	1.2	1.2	1.9	1.7	152	139	10-172	9
Heptachlor epoxide	ug/L	ND	1.2	1.2	1.7	1.7	139	138	10-168	1
Methoxychlor	ug/L	ND	3.8	3.8	5.7J	5.4J	152	144	13-183	
Decachlorobiphenyl (S)	%						154	139	19-200	
Tetrachloro-m-xylene (S)	%						142	127	10-137	S0

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 868935 Analysis Method: EPA 8270E
 QC Batch Method: EPA 3510C Analysis Description: 8270E TCLP MSSV
 Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92741256002

METHOD BLANK: 4476495 Matrix: Water
 Associated Lab Samples: 92741256002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	50.0	07/18/24 10:23	
2,4,5-Trichlorophenol	ug/L	ND	50.0	07/18/24 10:23	
2,4,6-Trichlorophenol	ug/L	ND	50.0	07/18/24 10:23	
2,4-Dinitrotoluene	ug/L	ND	50.0	07/18/24 10:23	
2-Methylphenol(o-Cresol)	ug/L	ND	50.0	07/18/24 10:23	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50.0	07/18/24 10:23	
Hexachloro-1,3-butadiene	ug/L	ND	50.0	07/18/24 10:23	
Hexachlorobenzene	ug/L	ND	50.0	07/18/24 10:23	
Hexachloroethane	ug/L	ND	50.0	07/18/24 10:23	
Nitrobenzene	ug/L	ND	50.0	07/18/24 10:23	
Pentachlorophenol	ug/L	ND	100	07/18/24 10:23	
Pyridine	ug/L	ND	50.0	07/18/24 10:23	
2,4,6-Tribromophenol (S)	%	88	10-166	07/18/24 10:23	
2-Fluorobiphenyl (S)	%	44	10-130	07/18/24 10:23	
2-Fluorophenol (S)	%	47	10-130	07/18/24 10:23	
Nitrobenzene-d5 (S)	%	52	10-133	07/18/24 10:23	
Phenol-d6 (S)	%	34	10-130	07/18/24 10:23	
Terphenyl-d14 (S)	%	95	10-193	07/18/24 10:23	

LABORATORY CONTROL SAMPLE: 4478373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	140	28	10-130	
2,4,5-Trichlorophenol	ug/L	500	413	83	36-150	
2,4,6-Trichlorophenol	ug/L	500	366	73	30-151	
2,4-Dinitrotoluene	ug/L	500	427	85	46-160	
2-Methylphenol(o-Cresol)	ug/L	500	411	82	32-130	
3&4-Methylphenol(m&p Cresol)	ug/L	500	370	74	29-130	
Hexachloro-1,3-butadiene	ug/L	500	102	20	10-130	
Hexachlorobenzene	ug/L	500	444	89	40-139	
Hexachloroethane	ug/L	500	111	22	10-130	
Nitrobenzene	ug/L	500	367	73	33-136	
Pentachlorophenol	ug/L	1000	585	59	19-156	
Pyridine	ug/L	500	287	57	10-130	
2,4,6-Tribromophenol (S)	%			93	10-166	
2-Fluorobiphenyl (S)	%			64	10-130	
2-Fluorophenol (S)	%			55	10-130	
Nitrobenzene-d5 (S)	%			71	10-133	
Phenol-d6 (S)	%			45	10-130	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

LABORATORY CONTROL SAMPLE: 4478373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			84	10-193	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4478374 4478375

Parameter	92741578005		MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits		
1,4-Dichlorobenzene	ug/L	ND	500	500	226	208	45	42	10-130	8	
2,4,5-Trichlorophenol	ug/L	ND	500	500	12.3J	355	2	71	10-174		M1
2,4,6-Trichlorophenol	ug/L	ND	500	500	13.4J	353	3	71	10-173		M1
2,4-Dinitrotoluene	ug/L	ND	500	500	345	359	69	72	29-168	4	
2-Methylphenol(o-Cresol)	ug/L	ND	500	500	216	308	43	62	10-130	35	R1
3&4-Methylphenol(m&p Cresol)	ug/L	ND	500	500	154	280	31	56	10-132	58	R1
Hexachloro-1,3-butadiene	ug/L	ND	500	500	220	194	44	39	10-130	13	
Hexachlorobenzene	ug/L	ND	500	500	372	342	74	68	27-145	8	
Hexachloroethane	ug/L	ND	500	500	232	203	46	41	10-130	13	
Nitrobenzene	ug/L	ND	500	500	277	278	55	56	10-145	0	
Pentachlorophenol	ug/L	ND	1000	1000	32.9J	704	3	70	10-178		M1
Pyridine	ug/L	ND	500	500	215	43.5J	43	9	10-130		M1
2,4,6-Tribromophenol (S)	%						4	83	10-166		S0
2-Fluorobiphenyl (S)	%						51	55	10-130		
2-Fluorophenol (S)	%						1	50	10-130		S0
Nitrobenzene-d5 (S)	%						55	57	10-133		
Phenol-d6 (S)	%						7	38	10-130		S0
Terphenyl-d14 (S)	%						80	71	10-193		

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869330 Analysis Method: EPA 8270E
 QC Batch Method: EPA 3510C Analysis Description: 8270E TCLP MSSV
 Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92741256001, 92741256009, 92741256010

METHOD BLANK: 4478660 Matrix: Water

Associated Lab Samples: 92741256001, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	50.0	07/19/24 11:15	
2,4,5-Trichlorophenol	ug/L	ND	50.0	07/19/24 11:15	
2,4,6-Trichlorophenol	ug/L	ND	50.0	07/19/24 11:15	
2,4-Dinitrotoluene	ug/L	ND	50.0	07/19/24 11:15	
2-Methylphenol(o-Cresol)	ug/L	ND	50.0	07/19/24 11:15	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50.0	07/19/24 11:15	
Hexachloro-1,3-butadiene	ug/L	ND	50.0	07/19/24 11:15	
Hexachlorobenzene	ug/L	ND	50.0	07/19/24 11:15	
Hexachloroethane	ug/L	ND	50.0	07/19/24 11:15	
Nitrobenzene	ug/L	ND	50.0	07/19/24 11:15	
Pentachlorophenol	ug/L	ND	100	07/19/24 11:15	
Pyridine	ug/L	ND	50.0	07/19/24 11:15	
2,4,6-Tribromophenol (S)	%	57	10-166	07/19/24 11:15	
2-Fluorobiphenyl (S)	%	24	10-130	07/19/24 11:15	
2-Fluorophenol (S)	%	35	10-130	07/19/24 11:15	
Nitrobenzene-d5 (S)	%	34	10-133	07/19/24 11:15	
Phenol-d6 (S)	%	25	10-130	07/19/24 11:15	
Terphenyl-d14 (S)	%	50	10-193	07/19/24 11:15	

LABORATORY CONTROL SAMPLE: 4480697

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	122	24	10-130	
2,4,5-Trichlorophenol	ug/L	500	373	75	36-150	
2,4,6-Trichlorophenol	ug/L	500	366	73	30-151	
2,4-Dinitrotoluene	ug/L	500	392	78	46-160	
2-Methylphenol(o-Cresol)	ug/L	500	344	69	32-130	
3&4-Methylphenol(m&p Cresol)	ug/L	500	315	63	29-130	
Hexachloro-1,3-butadiene	ug/L	500	94.8	19	10-130	
Hexachlorobenzene	ug/L	500	362	72	40-139	
Hexachloroethane	ug/L	500	117	23	10-130	
Nitrobenzene	ug/L	500	275	55	33-136	
Pentachlorophenol	ug/L	1000	855	86	19-156	
Pyridine	ug/L	500	146	29	10-130	
2,4,6-Tribromophenol (S)	%			96	10-166	
2-Fluorobiphenyl (S)	%			44	10-130	
2-Fluorophenol (S)	%			50	10-130	
Nitrobenzene-d5 (S)	%			53	10-133	
Phenol-d6 (S)	%			39	10-130	

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QUALITY CONTROL DATA

Project: Sludge
Pace Project No.: 92741256

LABORATORY CONTROL SAMPLE: 4480697

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			82	10-193	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869500 Analysis Method: EPA 8270E
 QC Batch Method: EPA 3510C Analysis Description: 8270E TCLP MSSV
 Laboratory: Pace Analytical Services - Charlotte
 Associated Lab Samples: 92741256003, 92741256004, 92741256005, 92741256006, 92741256007

METHOD BLANK: 4480022 Matrix: Water
 Associated Lab Samples: 92741256003, 92741256004, 92741256005, 92741256006, 92741256007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	50.0	07/19/24 12:32	
2,4,5-Trichlorophenol	ug/L	ND	50.0	07/19/24 12:32	
2,4,6-Trichlorophenol	ug/L	ND	50.0	07/19/24 12:32	
2,4-Dinitrotoluene	ug/L	ND	50.0	07/19/24 12:32	
2-Methylphenol(o-Cresol)	ug/L	ND	50.0	07/19/24 12:32	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	50.0	07/19/24 12:32	
Hexachloro-1,3-butadiene	ug/L	ND	50.0	07/19/24 12:32	
Hexachlorobenzene	ug/L	ND	50.0	07/19/24 12:32	
Hexachloroethane	ug/L	ND	50.0	07/19/24 12:32	
Nitrobenzene	ug/L	ND	50.0	07/19/24 12:32	
Pentachlorophenol	ug/L	ND	100	07/19/24 12:32	
Pyridine	ug/L	ND	50.0	07/19/24 12:32	
2,4,6-Tribromophenol (S)	%	84	10-166	07/19/24 12:32	
2-Fluorobiphenyl (S)	%	39	10-130	07/19/24 12:32	
2-Fluorophenol (S)	%	30	10-130	07/19/24 12:32	
Nitrobenzene-d5 (S)	%	36	10-133	07/19/24 12:32	
Phenol-d6 (S)	%	22	10-130	07/19/24 12:32	
Terphenyl-d14 (S)	%	94	10-193	07/19/24 12:32	

LABORATORY CONTROL SAMPLE: 4481425

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	409	82	10-130	
2,4,5-Trichlorophenol	ug/L	500	542	108	36-150	
2,4,6-Trichlorophenol	ug/L	500	510	102	30-151	
2,4-Dinitrotoluene	ug/L	500	560	112	46-160	
2-Methylphenol(o-Cresol)	ug/L	500	449	90	32-130	
3&4-Methylphenol(m&p Cresol)	ug/L	500	428	86	29-130	
Hexachloro-1,3-butadiene	ug/L	500	426	85	10-130	
Hexachlorobenzene	ug/L	500	554	111	40-139	
Hexachloroethane	ug/L	500	429	86	10-130	
Nitrobenzene	ug/L	500	432	86	33-136	
Pentachlorophenol	ug/L	1000	1130	113	19-156	
Pyridine	ug/L	500	138	28	10-130	
2,4,6-Tribromophenol (S)	%			122	10-166	
2-Fluorobiphenyl (S)	%			93	10-130	
2-Fluorophenol (S)	%			67	10-130	
Nitrobenzene-d5 (S)	%			86	10-133	
Phenol-d6 (S)	%			53	10-130	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

LABORATORY CONTROL SAMPLE: 4481425

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			111	10-193	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4481423 4481424

Parameter	92740508001		MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits		
1,4-Dichlorobenzene	ug/L	ND	500	500	221	419	44	84	10-130	62	R1
2,4,5-Trichlorophenol	ug/L	ND	500	500	196	425	39	85	10-174	74	R1
2,4,6-Trichlorophenol	ug/L	ND	500	500	136	398	27	80	10-173	98	R1
2,4-Dinitrotoluene	ug/L	ND	500	500	416	456	83	91	29-168	9	
2-Methylphenol(o-Cresol)	ug/L	ND	500	500	351	408	70	82	10-130	15	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	500	500	309	377	62	75	10-132	20	
Hexachloro-1,3-butadiene	ug/L	ND	500	500	225	457	45	91	10-130	68	R1
Hexachlorobenzene	ug/L	ND	500	500	443	477	89	95	27-145	7	
Hexachloroethane	ug/L	ND	500	500	202	419	40	84	10-130	70	R1
Nitrobenzene	ug/L	ND	500	500	419	471	84	94	10-145	12	
Pentachlorophenol	ug/L	ND	1000	1000	297	887	30	89	10-178	100	R1
Pyridine	ug/L	ND	500	500	333	343	67	69	10-130	3	
2,4,6-Tribromophenol (S)	%						48	98	10-166		
2-Fluorobiphenyl (S)	%						79	83	10-130		
2-Fluorophenol (S)	%						20	53	10-130		
Nitrobenzene-d5 (S)	%						86	92	10-133		
Phenol-d6 (S)	%						30	47	10-130		
Terphenyl-d14 (S)	%						89	95	10-193		

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 870164 Analysis Method: EPA 8270E
 QC Batch Method: EPA 3510C Analysis Description: 8270E TCLP MSSV
 Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92741256008

METHOD BLANK: 4482386 Matrix: Water
 Associated Lab Samples: 92741256008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	5.0	07/23/24 12:59	
2,4,5-Trichlorophenol	ug/L	ND	5.0	07/23/24 12:59	
2,4,6-Trichlorophenol	ug/L	ND	5.0	07/23/24 12:59	
2,4-Dinitrotoluene	ug/L	ND	5.0	07/23/24 12:59	
2-Methylphenol(o-Cresol)	ug/L	ND	5.0	07/23/24 12:59	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	5.0	07/23/24 12:59	
Hexachloro-1,3-butadiene	ug/L	ND	5.0	07/23/24 12:59	
Hexachlorobenzene	ug/L	ND	5.0	07/23/24 12:59	
Hexachloroethane	ug/L	ND	5.0	07/23/24 12:59	
Nitrobenzene	ug/L	ND	5.0	07/23/24 12:59	
Pentachlorophenol	ug/L	ND	10.0	07/23/24 12:59	
Pyridine	ug/L	ND	5.0	07/23/24 12:59	
2,4,6-Tribromophenol (S)	%	94	10-166	07/23/24 12:59	
2-Fluorobiphenyl (S)	%	63	10-130	07/23/24 12:59	
2-Fluorophenol (S)	%	48	10-130	07/23/24 12:59	
Nitrobenzene-d5 (S)	%	63	10-133	07/23/24 12:59	
Phenol-d6 (S)	%	34	10-130	07/23/24 12:59	
Terphenyl-d14 (S)	%	70	10-193	07/23/24 12:59	

LABORATORY CONTROL SAMPLE: 4484554

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	32.5	65	10-130	
2,4,5-Trichlorophenol	ug/L	50	51.7	103	36-150	
2,4,6-Trichlorophenol	ug/L	50	48.5	97	30-151	
2,4-Dinitrotoluene	ug/L	50	52.5	105	46-160	
2-Methylphenol(o-Cresol)	ug/L	50	42.8	86	32-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	39.7	79	29-130	
Hexachloro-1,3-butadiene	ug/L	50	34.1	68	10-130	
Hexachlorobenzene	ug/L	50	54.3	109	40-139	
Hexachloroethane	ug/L	50	35.1	70	10-130	
Nitrobenzene	ug/L	50	38.1	76	33-136	
Pentachlorophenol	ug/L	100	108	108	19-156	
Pyridine	ug/L	50	12.8	26	10-130	
2,4,6-Tribromophenol (S)	%			112	10-166	
2-Fluorobiphenyl (S)	%			76	10-130	
2-Fluorophenol (S)	%			56	10-130	
Nitrobenzene-d5 (S)	%			68	10-133	
Phenol-d6 (S)	%			42	10-130	

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

LABORATORY CONTROL SAMPLE: 4484554

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Terphenyl-d14 (S)	%			76	10-193	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4484555 4484556

Parameter	92741256008		MS	MSD	MS	MSD	MS	MSD	% Rec	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits		
1,4-Dichlorobenzene	ug/L	ND	500	500	408	299	82	60	10-130	31	R1
2,4,5-Trichlorophenol	ug/L	ND	500	500	394	84.9	79	17	10-174	129	R1
2,4,6-Trichlorophenol	ug/L	ND	500	500	312	69.5	62	14	10-173	127	R1
2,4-Dinitrotoluene	ug/L	ND	500	500	557	370	111	74	29-168	40	R1
2-Methylphenol(o-Cresol)	ug/L	ND	500	500	499	292	100	58	10-130	52	R1
3&4-Methylphenol(m&p Cresol)	ug/L	ND	500	500	457	246	91	49	10-132	60	R1
Hexachloro-1,3-butadiene	ug/L	ND	500	500	410	303	82	61	10-130	30	
Hexachlorobenzene	ug/L	ND	500	500	579	351	116	70	27-145	49	R1
Hexachloroethane	ug/L	ND	500	500	431	334	86	67	10-130	25	
Nitrobenzene	ug/L	ND	500	500	444	311	89	62	10-145	35	R1
Pentachlorophenol	ug/L	ND	1000	1000	348	81.4J	35	8	10-178		M1
Pyridine	ug/L	ND	500	500	317	258	63	52	10-130	20	
2,4,6-Tribromophenol (S)	%						74	18	10-166		
2-Fluorobiphenyl (S)	%						83	64	10-130		
2-Fluorophenol (S)	%						45	11	10-130		
Nitrobenzene-d5 (S)	%						78	60	10-133		
Phenol-d6 (S)	%						45	17	10-130		
Terphenyl-d14 (S)	%						82	66	10-193		

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QUALITY CONTROL DATA

Project: Sludge
Pace Project No.: 92741256

QC Batch:	867629	Analysis Method:	SW-846
QC Batch Method:	SW-846	Analysis Description:	Dry Weight/Percent Moisture
		Laboratory:	Pace Analytical Services - Charlotte

Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

SAMPLE DUPLICATE: 4472297

Parameter	Units	92741204006 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	24.3	22.4	8	N2

SAMPLE DUPLICATE: 4472298

Parameter	Units	92741256010 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	78.6	79.0	0	N2

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Sludge
Pace Project No.: 92741256

QC Batch:	870329	Analysis Method:	EPA 1010B
QC Batch Method:	EPA 1010B	Analysis Description:	1010 Flash Point, Closed Cup
		Laboratory:	Pace Analytical Services - Asheville

Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008

SAMPLE DUPLICATE: 4485056

Parameter	Units	92741256001 Result	Dup Result	RPD	Qualifiers
Flashpoint	deg F	>200	>200		

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QUALITY CONTROL DATA

Project: Sludge
Pace Project No.: 92741256

QC Batch: 870693 Analysis Method: EPA 1010B
QC Batch Method: EPA 1010B Analysis Description: 1010 Flash Point, Closed Cup
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92741256009, 92741256010

SAMPLE DUPLICATE: 4486816

Parameter	Units	92741256009 Result	Dup Result	RPD	Qualifiers
Flashpoint	deg F	>200	>200		

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 868736 Analysis Method: EPA 353.2 Rev 2.0 1993
 QC Batch Method: EPA 353.2 Rev 2.0 1993 Analysis Description: 353.2 Nitrate + Nitrite
 Laboratory: Pace Analytical Services - Asheville
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256009, 92741256010

METHOD BLANK: 4477563 Matrix: Solid
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/kg	ND	4.0	07/17/24 05:46	
Nitrogen, Nitrite	mg/kg	ND	4.0	07/17/24 05:46	
Nitrogen, NO2 plus NO3	mg/kg	ND	4.0	07/17/24 05:46	

LABORATORY CONTROL SAMPLE: 4477564

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/kg	15	16.0	107	90-110	
Nitrogen, Nitrite	mg/kg	10	10.2	102	90-110	
Nitrogen, NO2 plus NO3	mg/kg	25	26.2	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4477565 4477566

Parameter	92741256002		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
	Units	Result	Spike Conc.	Conc.	Result	Result	% Rec	% Rec					
Nitrogen, Nitrate	mg/kg	5660	45.8	45.8	49.6	49.4	-12200	-12200	90-110	0			
Nitrogen, Nitrite	mg/kg	ND	30.6	30.6	32.9	33.0	89	89	90-110	0	H1,M1		
Nitrogen, NO2 plus NO3	mg/kg	5660	76.4	76.4	82.5	82.4	-7300	-7300	90-110	0	H1,M1		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4477567 4477568

Parameter	92742103001		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
	Units	Result	Spike Conc.	Conc.	Result	Result	% Rec	% Rec					
Nitrogen, Nitrate	mg/kg	6230	632	632	7430	7550	190	209	90-110	2			
Nitrogen, Nitrite	mg/kg	91.2J	420	420	530	532	104	104	90-110	0			
Nitrogen, NO2 plus NO3	mg/kg	6320	1060	1060	7960	8080	156	167	90-110	2	M1		

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 870480	Analysis Method: EPA 353.2 Rev 2.0 1993
QC Batch Method: EPA 353.2 Rev 2.0 1993	Analysis Description: 353.2 Nitrate + Nitrite
	Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92741256008

METHOD BLANK: 4485892 Matrix: Solid
 Associated Lab Samples: 92741256008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/kg	ND	4.0	07/24/24 00:53	
Nitrogen, Nitrite	mg/kg	ND	4.0	07/24/24 00:53	
Nitrogen, NO2 plus NO3	mg/kg	ND	4.0	07/24/24 00:53	

LABORATORY CONTROL SAMPLE: 4485893

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/kg	15	15.0	100	90-110	
Nitrogen, Nitrite	mg/kg	10	9.9	99	90-110	
Nitrogen, NO2 plus NO3	mg/kg	25	24.8	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4485894 4485895

Parameter	Units	92741256008		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Nitrogen, Nitrate	mg/kg	4500	41.7	42.5	4450	4470	-136	-80	90-110	1				
Nitrogen, Nitrite	mg/kg	ND	27.9	28.2	102J	103J	77	81	90-110	H1,M1				
Nitrogen, NO2 plus NO3	mg/kg	4500	69.6	70.7	4450	4470	-81	-48	90-110	1 H1,M1				

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 875744 Analysis Method: EPA 353.2 Rev 2.0 1993
 QC Batch Method: EPA 353.2 Rev 2.0 1993 Analysis Description: 353.2 Nitrate + Nitrite
 Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92741256007

METHOD BLANK: 4511238 Matrix: Solid
 Associated Lab Samples: 92741256007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/kg	ND	4.0	08/15/24 00:41	
Nitrogen, Nitrite	mg/kg	ND	4.0	08/15/24 00:41	
Nitrogen, NO2 plus NO3	mg/kg	ND	4.0	08/15/24 00:41	

LABORATORY CONTROL SAMPLE: 4511239

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/kg	15	16.3	109	90-110	
Nitrogen, Nitrite	mg/kg	10	10.3	103	90-110	
Nitrogen, NO2 plus NO3	mg/kg	25	26.6	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4511240 4511241

Parameter	Units	92747725001		MS		MSD		MS		MSD		% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec					
Nitrogen, Nitrate	mg/kg	30.7	30.1	30.3	50.6	44.8	66	47	90-110	12				
Nitrogen, Nitrite	mg/kg	ND	20	20.2	30.4	30.5	135	135	90-110	0	M1			
Nitrogen, NO2 plus NO3	mg/kg	30.7	50.3	50.5	81.0	75.3	100	88	90-110	7	M1			

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QUALITY CONTROL DATA

Project: Sludge
 Pace Project No.: 92741256

QC Batch: 869557 Analysis Method: SM 4500-Cl-E-2011
 QC Batch Method: SM 4500-Cl-E-2011 Analysis Description: 4500 Chloride
 Laboratory: Pace Analytical Services - Asheville
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256008, 92741256009, 92741256010

METHOD BLANK: 4481603 Matrix: Solid
 Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	10.0	07/22/24 11:39	

LABORATORY CONTROL SAMPLE: 4481604

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	200	211	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4481605 4481606

Parameter	92741256001		MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
	Units	Result									
Chloride	mg/kg	547	316	316	996	991	142	141	90-110	0	M1

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QUALITY CONTROL DATA

Project: Sludge
Pace Project No.: 92741256

QC Batch:	682450	Analysis Method:	EPA 9014
QC Batch Method:	SW-846 7.3.3.2	Analysis Description:	733C Reactive Cyanide
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

METHOD BLANK: 3322844 Matrix: Solid

Associated Lab Samples: 92741256001, 92741256002, 92741256003, 92741256004, 92741256005, 92741256006, 92741256007, 92741256008, 92741256009, 92741256010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide, Reactive	mg/kg	ND	1.0	07/16/24 19:45	

LABORATORY CONTROL SAMPLE: 3322845

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide, Reactive	mg/kg	99.9	8.3	8	0-17	

SAMPLE DUPLICATE: 3322846

Parameter	Units	92737236004 Result	Dup Result	RPD	Qualifiers
Cyanide, Reactive	mg/kg	ND	ND		H3

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QUALIFIERS

Project: Sludge
Pace Project No.: 92741256

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.
A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

H1 Analysis conducted outside the EPA method holding time.

H2 Extraction or preparation conducted outside EPA method holding time.

H3 Sample was received or analysis requested beyond the recognized method holding time.

IH This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

IK The recalculated concentration of the calibration standard(s) did not meet method acceptance criteria; this result should be considered an estimated value.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

MH Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

P9 RPD between the primary and confirmatory analysis exceeded 40%.

R1 RPD value was outside control limits.

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QUALIFIERS

Project: Sludge
Pace Project No.: 92741256

ANALYTE QUALIFIERS

- S0 Surrogate recovery outside laboratory control limits.
- v1 The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
- v2 The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
- v3 The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sludge
Pace Project No.: 92741256

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92741256002	SS-1D	3510C	2344257	EPA 8081B	2344257
92741256009	SS-5S	3510C	2344257	EPA 8081B	2344257
92741256001	SS-1S	8151A	2334324	EPA 8151A	2334324
92741256002	SS-1D	8151A	2334324	EPA 8151A	2334324
92741256004	SS-2D	8151A	2335559	EPA 8151A	2335559
92741256005	SS-3S	8151A	2335559	EPA 8151A	2335559
92741256006	SS-3D	8151A	2335559	EPA 8151A	2335559
92741256008	SS-4D	8151A	2335559	EPA 8151A	2335559
92741256009	SS-5S	8151A	2335559	EPA 8151A	2335559
92741256010	SS-5D	8151A	2335559	EPA 8151A	2335559
92741256001	SS-1S	EPA 3510C	871038	EPA 8081B	871299
92741256003	SS-2S	EPA 3510C	871038	EPA 8081B	871299
92741256004	SS-2D	EPA 3510C	871038	EPA 8081B	871299
92741256005	SS-3S	EPA 3510C	871038	EPA 8081B	871299
92741256006	SS-3D	EPA 3510C	871038	EPA 8081B	871299
92741256007	SS-4S	EPA 3510C	871038	EPA 8081B	871299
92741256008	SS-4D	EPA 3510C	871038	EPA 8081B	871299
92741256010	SS-5D	EPA 3510C	871038	EPA 8081B	871299
92741256001	SS-1S	EPA 9056	801948	EPA 9056	801957
92741256002	SS-1D	EPA 9056	801948	EPA 9056	801957
92741256003	SS-2S	EPA 9056	801948	EPA 9056	801957
92741256004	SS-2D	EPA 9056	801948	EPA 9056	801957
92741256005	SS-3S	EPA 9056	801948	EPA 9056	801957
92741256006	SS-3D	EPA 9056	801948	EPA 9056	801957
92741256007	SS-4S	EPA 9056	801948	EPA 9056	801957
92741256008	SS-4D	EPA 9056	801948	EPA 9056	801957
92741256009	SS-5S	EPA 9056	801948	EPA 9056	801957
92741256010	SS-5D	EPA 9056	801948	EPA 9056	801957
92741256001	SS-1S	EPA 3050B	867898	EPA 6010D	867965
92741256002	SS-1D	EPA 3050B	867898	EPA 6010D	867965
92741256003	SS-2S	EPA 3050B	867898	EPA 6010D	867965
92741256004	SS-2D	EPA 3050B	867898	EPA 6010D	867965
92741256005	SS-3S	EPA 3050B	867898	EPA 6010D	867965
92741256006	SS-3D	EPA 3050B	867898	EPA 6010D	867965
92741256007	SS-4S	EPA 3050B	867898	EPA 6010D	867965
92741256008	SS-4D	EPA 3050B	867898	EPA 6010D	867965
92741256009	SS-5S	EPA 3050B	867898	EPA 6010D	867965
92741256010	SS-5D	EPA 3050B	868030	EPA 6010D	868074
92741256001	SS-1S	EPA 3010A	869696	EPA 6010D	869722
92741256002	SS-1D	EPA 3010A	869696	EPA 6010D	869722
92741256003	SS-2S	EPA 3010A	869696	EPA 6010D	869722
92741256004	SS-2D	EPA 3010A	869696	EPA 6010D	869722
92741256005	SS-3S	EPA 3010A	869696	EPA 6010D	869722
92741256006	SS-3D	EPA 3010A	869696	EPA 6010D	869722
92741256007	SS-4S	EPA 3010A	869696	EPA 6010D	869722

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sludge
Pace Project No.: 92741256

Table with 6 columns: Lab ID, Sample ID, QC Batch Method, QC Batch, Analytical Method, Analytical Batch. It lists various sample IDs and their corresponding QC and analytical data.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sludge
Pace Project No.: 92741256

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92741256003	SS-2S	EPA 3510C	869500	EPA 8270E	869582
92741256004	SS-2D	EPA 3510C	869500	EPA 8270E	869582
92741256005	SS-3S	EPA 3510C	869500	EPA 8270E	869582
92741256006	SS-3D	EPA 3510C	869500	EPA 8270E	869582
92741256007	SS-4S	EPA 3510C	869500	EPA 8270E	869582
92741256008	SS-4D	EPA 3510C	870164	EPA 8270E	870227
92741256009	SS-5S	EPA 3510C	869330	EPA 8270E	869469
92741256010	SS-5D	EPA 3510C	869330	EPA 8270E	869469
92741256001	SS-1S	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256002	SS-1D	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256003	SS-2S	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256004	SS-2D	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256005	SS-3S	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256006	SS-3D	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256007	SS-4S	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256008	SS-4D	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256009	SS-5S	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256010	SS-5D	EPA 5035A/5030B	868084	EPA 8260D	868220
92741256001	SS-1S	EPA 8260D	869222		
92741256002	SS-1D	EPA 8260D	869222		
92741256003	SS-2S	EPA 8260D	869222		
92741256004	SS-2D	EPA 8260D	869588		
92741256005	SS-3S	EPA 8260D	869588		
92741256006	SS-3D	EPA 8260D	869588		
92741256007	SS-4S	EPA 8260D	869588		
92741256008	SS-4D	EPA 8260D	869588		
92741256009	SS-5S	EPA 8260D	869588		
92741256010	SS-5D	EPA 8260D	869588		
92741256001	SS-1S	SW-846	867629		
92741256002	SS-1D	SW-846	867629		
92741256003	SS-2S	SW-846	867629		
92741256004	SS-2D	SW-846	867629		
92741256005	SS-3S	SW-846	867629		
92741256006	SS-3D	SW-846	867629		
92741256007	SS-4S	SW-846	867629		
92741256008	SS-4D	SW-846	867629		
92741256009	SS-5S	SW-846	867629		
92741256010	SS-5D	SW-846	867629		
92741256001	SS-1S	EPA 1010B	870329		
92741256002	SS-1D	EPA 1010B	870329		
92741256003	SS-2S	EPA 1010B	870329		
92741256004	SS-2D	EPA 1010B	870329		
92741256005	SS-3S	EPA 1010B	870329		
92741256006	SS-3D	EPA 1010B	870329		
92741256007	SS-4S	EPA 1010B	870329		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sludge
Pace Project No.: 92741256

Table with 6 columns: Lab ID, Sample ID, QC Batch Method, QC Batch, Analytical Method, Analytical Batch. It lists various sample IDs and their corresponding QC and analytical data.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sludge
Pace Project No.: 92741256

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92741256003	SS-2S	SW-846 7.3.4.2	682447	SM 4500-S2-F-2011	682541
92741256004	SS-2D	SW-846 7.3.4.2	682447	SM 4500-S2-F-2011	682541
92741256005	SS-3S	SW-846 7.3.4.2	682447	SM 4500-S2-F-2011	682541
92741256006	SS-3D	SW-846 7.3.4.2	682447	SM 4500-S2-F-2011	682541
92741256007	SS-4S	SW-846 7.3.4.2	682447	SM 4500-S2-F-2011	682541
92741256008	SS-4D	SW-846 7.3.4.2	682447	SM 4500-S2-F-2011	682541
92741256009	SS-5S	SW-846 7.3.4.2	682447	SM 4500-S2-F-2011	682541
92741256010	SS-5D	SW-846 7.3.4.2	682447	SM 4500-S2-F-2011	682541

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville Eden Greenwood Huntersville Raleigh Mechanicsville Atlanta Kernersville

Sample Condition Upon Receipt

Client Name: Venator Chemicals

Project #:

WO#: 92741256



92741256

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Custody Seal Present? Yes No Seals Intact? Yes No N/A

Date/Initials Person Examining Contents: APM
7-11-24

Packing Material: Bubble Wrap Bubble Bags None Other

Biological Tissue Frozen?
 Yes No N/A

Thermometer:

IR Gun ID: 927070 Type of Ice: Wet Blue None

Cooler Temp: 16, 4.3, 2.6, 3.1, 1.3 Correction Factor: 0.0
Add/Subtract (°C)

Temp should be above freezing to 6°C
 Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 16, 4.3, 2.6, 3.1, 1.3

USDA Regulated Soil (N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? Yes No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

		Comments/Discrepancy:
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Short Hold Time Analysis (<72 hr.)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Dissolved analysis: Samples Field Filtered?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	8.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Includes Date/Time/ID/Analysis Matrix: <u>SL</u>		
Headspace in VOA Vials (>5-6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? Yes No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____



DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt

Effective Date: 05/24/2024

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project # **WO# : 92741256**

PM: JWB

Due Date: 07/25/24

CLIENT: 92-Chem Spec

Laboratory Receiving Location: Asheville Eden Greenwood Huntersville Raleigh Me...

Client _____ Profile/EZ (Circle one) _____ Notes _____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)		
CC																													
1										5											3								
2										4																			
3										5																			
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY Analytical Request Document
 Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY - Aftix Workorder/Login Label Here

Company Name: Venator Chemicals, LLC
 Street Address: P.O. Box 1330, Harrisburg, NC 28075

Contact/Report To: Jonna Stein
 Phone #: _____
 E-Mail: jonna_stein@venatorcorp.com
 CC E-Mail: _____

Customer Project #: Sludge

Invoice To: Accounts Payable
 Invoice E-Mail: ap@chemspec.com
 Purchase Order # (if applicable): _____

Site Collection Info/Facility ID (as applicable):

Quote #: _____
 County / State origin of sample(s): North Carolina

Time Zone Collected: [] AK [] PT [] MT [] CT [] ET

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [] Yes [] No

Date Deliverables: [] Level II [] Level III [] Level IV
 [] Request - JHC

Rush (Pre-approval required):
 [] Same Day [] 1 Day [] 2 Day [] 3 Day [] Other _____
 Date Results: _____
 Requested: _____
 Analysis: Field Filtered (if applicable): [] Yes [] No

Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Biossary (B), Vapor (V), Surface Water (SW), Sediment (SED), Sludge (SL), Caustic (CX), Leachate (LL), Biosolid (BS), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Composite Start		Collected or Composite End		# Cont.	Res. Chlorine Results	Units
			Date	Time	Date	Time			
SS-15	SS	C	7/16/24	1030					
SS-1D	SS	C		1030					
SS-2S	SS	C		1330					
SS-2D	SS	C		1330					
SS-3S	SS	C		1215					
SS-3D	SS	C		1215					
SS-4S	SS	C		1600					
SS-4D	SS	C		1600					
SS-5S	SS	C		1500					
SS-5D	SS	C		1500					

Additional Instructions from Pace: _____
 Collected By: *Harry Carter*
 Signature: _____

Relinquished by/Company: Signature: *Harry Carter* Date/Time: 7/11/24 0956
 Received by/Company: Signature: *Jonna Stein* Date/Time: _____

Relinquished by/Company: Signature: _____ Date/Time: _____
 Received by/Company: Signature: _____ Date/Time: _____



Scan QR Code for instructions

Specify Container Size **
 Identify Container Preservative Type ***
 Analysis Requested

1010 Flashpoint, Closed Cup; 6010 MET ICP; 7471 Mer
 6010 MET ICP, TCLP; 7470 Mercury, TCLP; TCLP Prep
 8260D/5035A/5030B Volatiles; Percent Moisture
 8270E TCLP RVE; 8260D MSV TCLP
 Nitrate/Nitrite and Anions
 Reactivity

Customer Remarks / Special Conditions / Possible Hazards:
 # Cores: 5
 Thermometer ID: _____ Correction Factor (°C): _____ Obs. Temp. (°C) _____ Corrected Temp. (°C) _____ On Ice: _____
 Tracking Number: _____
 Delivered by: [] In Person [] Courier [] FedEx [] UPS [] Other

Lab Use Only
 Prof. Mgr: *Jonathan Biddix*
 ActNum / Client ID: _____
 Table #: _____
 Profile / Template: *8795*
 Preg / Bottle Ord. ID: *EZ 3134531*
 Sample Comment: _____
 Preservation non-conformance identified for sample.

Pace Analytical - Huntersville, NC

Sample Delivery Group: L1767640
Samples Received: 08/15/2024
Project Number: 92741256
Description: Sludge
Site: 003
Report To: Jonathan Biddix
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078

Entire Report Reviewed By:



Nancy McLain
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	² Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	³ Ss
SS-2S L1767640-01	5	
SS-4S L1767640-02	6	⁴ Cn
Qc: Quality Control Summary	7	⁵ Sr
Chlorinated Acid Herbicides (GC) by Method 8151A	7	
Gl: Glossary of Terms	8	⁶ Qc
Al: Accreditations & Locations	9	⁷ Gl
Sc: Sample Chain of Custody	10	⁸ Al
		⁹ Sc

SAMPLE SUMMARY

SS-2S L1767640-01 Waste

Collected by:
 Collected date/time: 07/10/24 13:30
 Received date/time: 08/15/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2344273	1	08/16/24 10:44	08/16/24 10:44	JWS	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG2345285	1	08/19/24 04:41	08/20/24 00:11	NWH	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

SS-4S L1767640-02 Waste

Collected by:
 Collected date/time: 07/10/24 16:00
 Received date/time: 08/15/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG2344273	1	08/16/24 10:44	08/16/24 10:44	JWS	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG2345285	1	08/19/24 04:41	08/20/24 00:22	NWH	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Nancy McLain
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		8/16/2024 10:44:16 AM	WG2344273
Initial pH	9.47		8/16/2024 10:44:16 AM	WG2344273
Final pH	5.99		8/16/2024 10:44:16 AM	WG2344273

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	U	<u>T8</u>	0.000667	0.00200	1	1	08/20/2024 00:11	WG2345285
2,4-D	U	<u>T8</u>	0.000667	0.00200	10	1	08/20/2024 00:11	WG2345285
(S) 2,4-Dichlorophenyl Acetic Acid	79.2			14.0-158			08/20/2024 00:11	WG2345285

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		8/16/2024 10:44:16 AM	WG2344273
Initial pH	9.42		8/16/2024 10:44:16 AM	WG2344273
Final pH	6.03		8/16/2024 10:44:16 AM	WG2344273

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	U	T8	0.000667	0.00200	1	1	08/20/2024 00:22	WG2345285
2,4-D	U	T8	0.000667	0.00200	10	1	08/20/2024 00:22	WG2345285
(S) 2,4-Dichlorophenyl Acetic Acid	83.6			14.0-158			08/20/2024 00:22	WG2345285

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R4108946-1 08/19/24 21:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
2,4,5-TP (Silvex)	U		0.000667	0.00200
2,4-D	U		0.000667	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	82.0			14.0-158

Laboratory Control Sample (LCS)

(LCS) R4108946-2 08/19/24 22:06

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
2,4,5-TP (Silvex)	0.0250	0.0230	92.0	50.0-125	
2,4-D	0.0250	0.0255	102	50.0-120	
(S) 2,4-Dichlorophenyl Acetic Acid			83.6	14.0-158	

L1767160-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1767160-01 08/19/24 23:03 • (MS) R4108946-3 08/19/24 23:14 • (MSD) R4108946-4 08/19/24 23:26

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
2,4,5-TP (Silvex)	0.0250	U	ND	ND	96.0	96.4	1	50.0-125			0.416	20
2,4-D	0.0250	U	ND	ND	107	107	1	50.0-120			0.000	20
(S) 2,4-Dichlorophenyl Acetic Acid					101	96.6		14.0-158				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

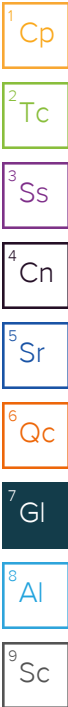
Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.



Qualifier Description

T8	Sample(s) received past/too close to holding time expiration.
----	---

ACCREDITATIONS & LOCATIONS

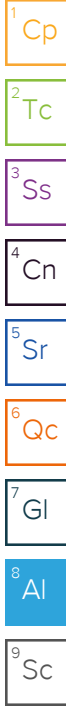
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.





Ship To:
 Pace National
 12065 Lebanon Rd
 Mt. Juliet, TN 37122
 Phone (615) 758-5858

INTER LABORATORY WORK ORDER # 92741256

(To be completed by sending lab)

17167640

Sending Project No	92741256
Receiving Project No	
Check Box for Consolidated Invoice	<input type="checkbox"/>
Date Prepared	08/14/24
REQUESTED COMPLETION DATE	7/25/2024

Sending Region	IR92-Charlotte	Sending Project Mgr.	Jonathan W Biddix
Receiving Region	IR850-Pace National	External Client	Venator Chemicals, LLC.
State of Sample Origin	NC	QC Deliverable	STD REPORT

All questions should be addressed to sending project manager.

Requested Reportable Units _____ Report Wet or Dry Weight? Dry weight, if IRWO Lab Need to run? Cert. Needed _____

WORK REQUESTED						
Method Description	Container Type	Quantity of containers	Preservative	Quantity of Samples	Accode	Accode Desc
TCLP herbicides	AG1U		Unpreserved	2	SI-21WET0	SUB PASI WTA
TCLP herbicides	AG1U		Unpreserved	2	SI-21WET0	SUB PASI WTA
TCLP herbicides	AG1U		Unpreserved	2	SI-21WET0	SUB PASI WTA
TCLP herbicides	AG1U		Unpreserved	8	SI-21WET0	SUB PASI WTA

Special Requirements: Report B, Standard Report (B), ERM Equis (94)

FOR ANALYTICAL WORK COMPLETED THIS SECTION ALSO

Return Samples to Sending Region: Yes No

DISPOSITION OF FORM

Original sent to the receiving lab - Copy kept at the sending lab.
 When work completed: Original sent to the ABM at the receiving laboratory. Copies are made to corporate as needed.



September 24, 2024

Jonna Stein, EHS Manager
Venator Chemicals, LLC
5910 Pharr Mill Rd.
Harrisburg, NC 28075

RE: Letter regarding completeness of Application H-2023-02-SUP Venator

Dear Ms. Stein:

The Town has completed its review of the project's application response, delivered via email and hardcopy, on September 4, 2024. This response consisted of a Sediment Sampling for Lagoon 5 Technical Memo dated August 30, 2024, including the previously submitted documents in connection with the application.

Based on these submissions, SUP application (H-2023-02) is deemed complete by staff pursuant to Section 145.01.05 of the UDO. This is not a comment on the probative strength of those submissions with regard to the elements required for an SUP approval.

The Town will continue its review of the application package and will follow up with your team on a potential public hearing date which will likely be in December.

Regards,

A handwritten signature in cursive script that reads "Shelley DeHart".

Shelley DeHart, AICP
Assistant Planning Director

Cc: Zac Gordon, Planning Director



Special Meeting **Public Hearing Notice**

To Whom It May Concern.

Our records indicate that you own property near a proposed project located at 5910 Pharr Mill Rd at Venator Chemicals. This letter is to inform you that Venator Chemicals require approval of a special use permit (SUP) to allow for the addition of an onsite industrial landfill supporting current operations at Venator Chemicals.

A public hearing on this request will be held at a special meeting scheduled for Wednesday, January 15, 2025, at 6:30 pm at Venture Church Auditorium located at 4245 Main Street, Harrisburg. You are being notified of this public hearing in accordance with the requirements of Section 145.01.08.C of the Harrisburg Unified Development Ordinance (UDO) and are invited to attend the meeting.

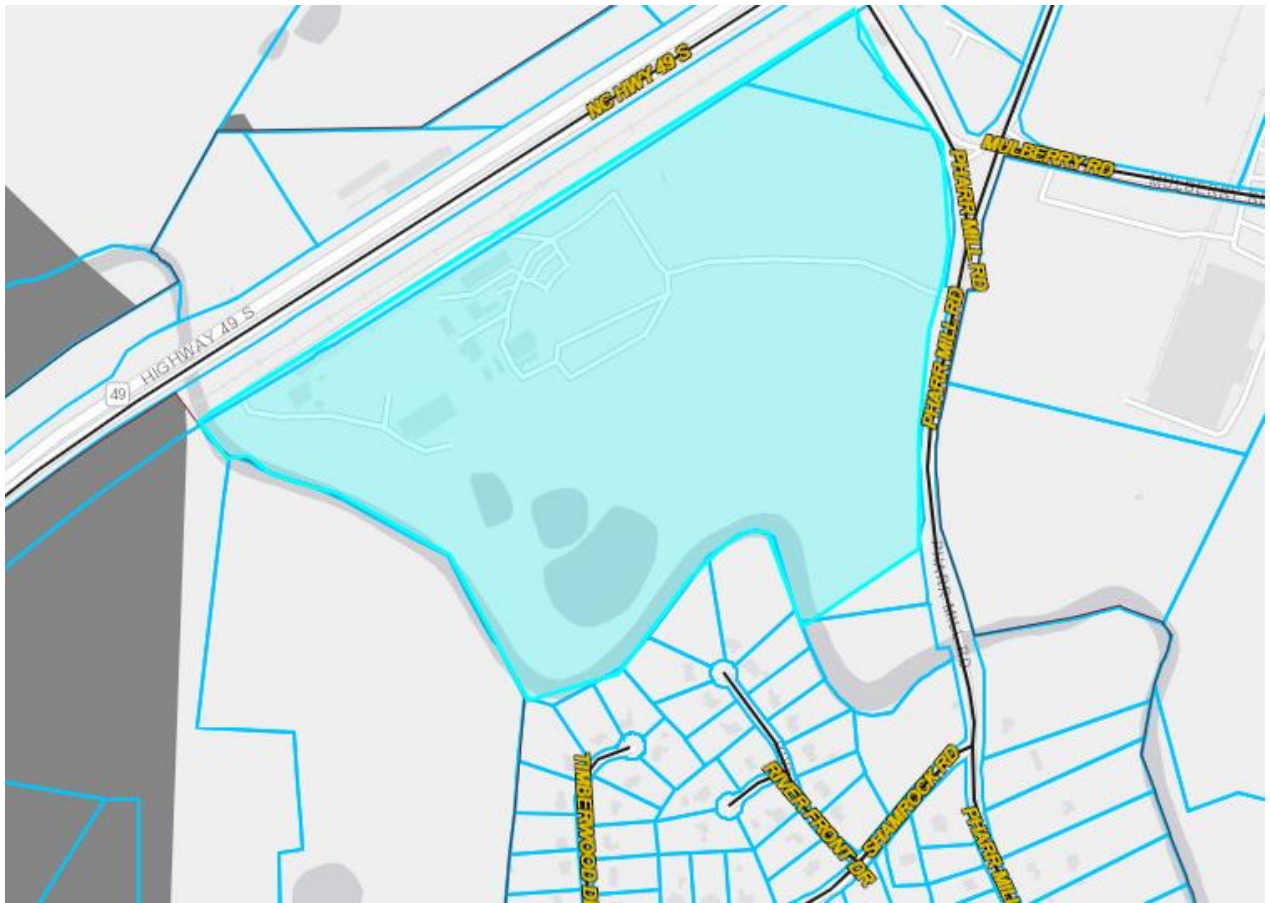
These types of applications (SUPs) are required to be heard in a formal hearing, similar to a court, in a “quasi-judicial” capacity. The Harrisburg Board of Adjustment conducts such a quasi-judicial or evidentiary hearing. It is important to know that in an evidentiary hearing, proponents and/or opponents must present substantial, competent, and material evidence that the project meets, or does not meet, a series of specifically defined standards of [Section 140.04.06 of the UDO](#). **Information can only be presented at the scheduled hearing, therefore all those wishing to testify shall be present and sworn in before speaking.**

The number at Town Hall is 704-455-0738 if you have any questions prior to the meeting.

H2023-02-SUP Venator Public Hearing

Date: Wednesday, January 15 , 2025
Time: 6:30 PM
Location: Venture Church
4245 Main Street
Harrisburg, NC 28075

Site Location Map





Continued Public Hearing Notice

To Whom It May Concern.

Our records indicate that you own property near the proposed project located at 5910 Pharr Mill Rd at Venator Chemicals. This letter is to inform you that Venator Chemicals requires approval of a special use permit (SUP) to allow for the addition of an onsite industrial landfill supporting current operations at Venator Chemicals.

A public hearing regarding this request was scheduled and opened in a special meeting held on Wednesday, January 15, 2025, at 6:30 pm at Venture Church Auditorium located at 4245 Main Street, Harrisburg. **A continuance of said public hearing was requested that evening by the applicant and approved by the Board of Adjustment. The public hearing was continued to March 4th, 2025, at 5:30 p.m. at the same location (Venture Church Auditorium).**

You are being notified of this public hearing continuance similar to the requirements of Section 145.01.08.C of the Harrisburg Unified Development Ordinance (UDO) and are invited to attend the meeting.

These types of applications (SUPs) are required to be heard in a formal hearing, similar to a court, in a “quasi-judicial” capacity. The Harrisburg Board of Adjustment conducts such a quasi-judicial or evidentiary hearing. It is important to know that in an evidentiary hearing, proponents and/or opponents must present substantial, competent, and material evidence that the project meets, or does not meet, a series of specifically defined standards of [Section 140.04.06 of the UDO](#).

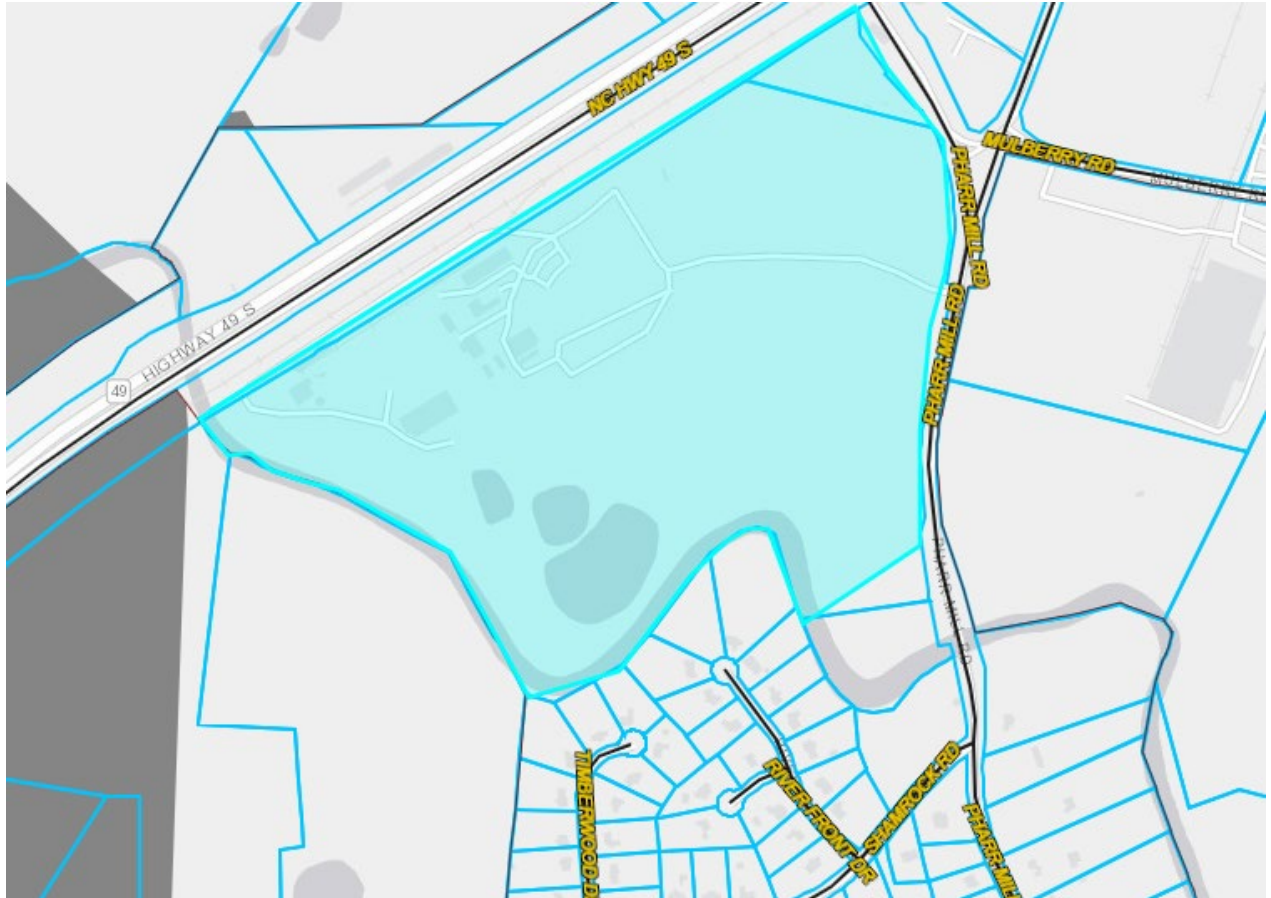
Information can only be presented at the scheduled hearing, therefore all those wishing to testify shall be present and sworn in before speaking.

The number at Town Hall is 704-455-0738 if you have any questions prior to the meeting.

H2023-02-SUP Venator Public Hearing

Date: Tuesday, March 4 , 2025
Time: 5:30 PM
Location: Venture Church
4245 Main Street
Harrisburg, NC 28075

Site Location Map



Memo



TO: Shelley DeHart, Assistant Planning Director – Town of Harrisburg

FROM: Robert Brookshire, Environmental Department Manager - Terracon

CC: Neal McElveen (Terracon) and Jeff Hvozdk (Terracon)

DATE: September 19, 2024

RE: Venator Lagoon Sediment Sampling Results Review

In response to the Town of Harrisburg's request for a review of the Lagoon (#5) Sediment Sampling Results, provided by ERM (Venator's Environmental Consultant) and dated August 30, 2024, Terracon is providing the following commentary:

- *1997 Sediment Sampling (Chalam Pakala Engineering)* = 50 sediment samples collected and analyzed for TCLP from 50 locations. Full report was not available for review.
 - *2017 Sediment Sampling (Brown and Caldwell)* = 18 sediment samples collected from 54 aliquots and analyzed for TCLP, RCRA 8 Metals, Pesticides, Herbicides, pH (corrosivity), reactivity, ignitability, sulfate, chloride, nitrate, nitrite, volatile organic compounds (VOCs), and select total metals. The sediment sludge sampling methods and means were in accordance with EPA Region 4 Science and Ecosystem Support Division's (SESD's) Operating Procedure for Waste Sampling, dated December 16, 2016.
 - *2024 Sediment Sampling (ERM)* = 2 sediment samples collected from shallow and deep intervals at 10 locations, composited into 5 shallow and 5 deep sediment samples for analysis of TCLP, RCRA 8 Metals, VOCs, semi-volatile organic compounds (SVOCs), pesticides, herbicides, pH (corrosivity), reactivity, ignitability, sulfate, chloride, nitrate, nitrite, chloride, sulfate, and select total metals.
- Were the 2024 sediment sludge sampling methods and means performed in accordance with SESD's updated Operating Procedure for Waste Sampling, dated May 5, 2020?
 - Are 10 sediment borings representative and sufficient? The 2017 sediment sludge sampling *"involved establishing a grid and employing random sample locations within each specified grid cell and then creating one composite sample per grid. Nine grid cells were established to segregate the composite borings. Within each of the nine grid cells, six boring locations were randomly selected and sludge aliquots were collected, three in the shallow sludge (0-6 feet below the top of the sludge (bts) and three in deeper sludge (6ft bts – the bottom of the lagoon)."* Did 2024 sampling follow the same approach? If not, how and why was it modified? Which of the 9 grids are represented in the 2024 sediment sludge sampling? What is "bottom of lagoon"? Is bottom uniform (i.e., same elevation) or was it sloped? How did the samplers prevent infiltration of lagoon water into boreholes during hand augering?
 - Was composite sampling methodology performed in accordance with EPA Region IV Soil Sampling Guidelines? According to the 2024 *Lagoon Sediment Sampling Results* Technical Memo, *"CCI performed borings with a hand auger at ten locations (Figure 2) and collected two sediment samples from each location: one shallow (from approximately 2-7 feet depth) and one deep (from approximately 8-12 feet depth). The samples were composited into five shallow composite samples and five deep composite samples, for a total of ten composite sediment samples. ERM provided instruction for sampling locations and collection."*

- According to the 2017 report, *"The average thickness of the sludge in each grid cell ranged from approximately 8 feet to 15 feet. Generally, the sludge was thickest in the northeast portion of lagoon 5, with less sludge measured in the southwest portion of Lagoon 5. A total volume of approximately 72,900 cubic yards was calculated."* Does 15' represent bottom the of lagoon 5? What % slope is this if 8 and 15 feet are bottom of lagoon? Why does calculated volume of sludge differ from calculations in other documents (i.e., 35,000 CY in the *Response to Information Request from Town of Harrisburg*, February 28, 2024)
- According to the 2017 report, *"Nineteen sediment samples were tested for total concentration for over 60 volatile organic compounds. All were below the laboratory reporting limit except for grid 1 upper and lower samples which detected 144 ug/kg and 138 ug/kg (parts per billion) benzene, respectively. The site does not use benzene in its manufacturing or maintenance process."* Where did benzene come from? Detections exceed soil-to-groundwater PSRG of 10 ug/kg for benzene. Why is benzene not present in detectable concentrations from sediment collected during the 2024 sediment sampling? Can you confirm that no remediation has occurred within the limits of Lagoon 5 that could have resulted in the absence of benzene? Is the absence of benzene in 2024 indicative of sampling methodology inconsistencies?
- The 2024 Technical Memo states that *"The samples were analyzed for TCLP RCRA 8 metals, VOCs, SVOCs, pesticides, herbicides, pH (corrosivity), reactivity, and ignitability. Pace analytical also performed total analyses for nitrate, nitrite, chloride, sulfate, select total metals."* Nitrate/nitrite, herbicide, and pesticide samples flagged for being analyzed out of hold. COC shows collection date of 7/10/24 for TCLP herbicides, but not released until 8/14/24 and not received by lab until 8/15/24. Were the samples preserved on ice during that period? What caused the laboratory delay? Sulfate flagged for lab accreditation. Does Pace Analytical Services – Indianapolis have NC certification?
- According to the 2024 Technical Memo, tetrachloroethene (PCE) was detected in sediment samples above the PSRG but was not discussed in the cover letter. Why was PCE not discussed? Where did the PCE come from? Is PCE a known byproduct of onsite operations? Is the presence of PCE in sediment samples representative of an upset to the wastewater processes? What explanation is there for the absence of PCE in 2017 sediment samples versus 2024?