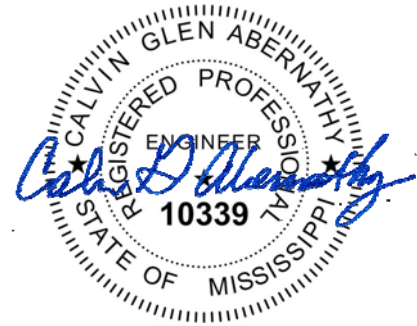


March 11, 2020

ADDENDUM NO. 2

Re: **GS# 323-016**
LAGOON SLUDGE REMOVAL PROJECT
South Mississippi Correctional Institute
Leakesville, Mississippi



Bid Date: March 17, 2020 (2:00 PM local time)

NOTICE TO ALL DOCUMENT HOLDERS:

The following additions, changes and clarifications to the Specifications for the subject project are to be included as part of the Contract Documents, and thus amend the Scope of Work:

GENERAL

Item No. 1 A Pre-Bid Conference was held on March 5, 2020 at 11:00 AM at the South Mississippi Correctional Institute located at 22689 Highway 63 North, Leakesville, Mississippi 39451. The participant list and summary minutes to the meeting are attached as Attachment A. The meeting minutes discusses many of the security details that will be required for this project.

SPECIFICATIONS

- Item No. 2 Section 00500 – Standard Form of Agreement Between The Owner and the Contractor, Article 2.2.1. Add “The stipulated liquidated damages described in Paragraph 9.11 of the *Supplementary Conditions* are in the amount of **five hundred Dollars (\$500.00) for each calendar day.**”
- Item No. 3 Section 02610 Removal and Disposal of Wastewater Sludge. At the end of Paragraph 1.3A insert “Laboratory results from sludge sampling is attached as Exhibit A – Sludge Testing Results from Pace Analytical dated September 11, 2019 at the end of this specification.”
- Item No. 4 Section 02610 Removal and Disposal of Wastewater Sludge. Insert Paragraph 1.4 A.4 as follows: “4. Land application at a permitted or State/EPA certified land application site operating under the guidelines and requirements of 40 CFR Part 503. Certification or documentation of active permit of the land application site shall be provided prior to applying any sludge from the South MSC I facility.”

- Item No. 5 Section 02610 Removal and Disposal of Wastewater Sludge. Insert the following at the end of Paragraph 3.4.B "All truck weighing shall be performed by a certified scale."

DRAWINGS

- Item No. 6 Sheet 7 - Proposed Haul Road Site Plan. Add the following note on left side of the drawing just above the proposed borrow pit area. "It is assumed that the soils within the proposed borrow pit is suitable for roadway construction. If the soils are not suitable, an alternate location at the job site will be identified. If on-site soils are not suitable, a change order will be negotiated with the Contractor to provide suitable soils from an off-site location."

South Mississippi Correctional Institute – Lagoon Sludge Removal Project

Pre-Bid Conference Meeting Minutes from March 5, 2020

Miss. Bureau of Buildings Project: GS#323-016

Bid Date: March 17, 2020 at 2:00 PM

Bid Location: Miss Bureau of Building, Grounds and Real Property Management
501 North West Street, Suite 1401B
Woolfolk Building, 14th Floor
Jackson, MS 39201

The following is a summary of the major items discussed and agreed on during the Pre Bid conference held on 3/5/2020 at the facility in Leakesville MS. These items are to be incorporated into the Contract Documents by Addendum No. 2.

Attendees:

Rick Davis – Bureau of Buildings – 601-359-3621 – rick.davis@dfa.ms.gov
Angelica Concepcion – 706-955-5121 – aconcepcion@pressrentals.com
Steve Hall – Denali Water Solutions – 770-845-0078 – steve.hall@denaliwater.com
Randy Sollie – Denali Water Solutions – 251-463-3730 – randy.sollie@denaliwater.com
Calvin Abernathy – Mid-South Consulting – 662-397-6959 – abernathycg@mis-southconsulting.com
Jeff Knight – Mid-South Consulting – 601-955-4933 – jefferyknight@bellsouth.net
Hunter Dunaway – TL Wallace Construction – 601736-4525 – hdunaway@tlwallace.com
Andrew Heard – Hemphill Construction – 601-209-7737 – aheard@hemphillconstruction.com
Bryan Breaux – Breaux Services, Inc. – 228-493-5963 – bryan@breauxservice.com
Jason Kittrell – Mississippi Department of Corrections – 601-394-9668 – jkittrell@mdoc.state.ms.us

Please note that this was not a mandatory Pre-Bid Conference

Discussion by Mr. Rick Davis (Bureau of Buildings Project Manager)

1. Mr. Davis opened the meeting and distributed copies of the Pre-Bid agenda and instructions to bidders. Copy of the handout is attached as Attachment No. 1
2. Mr. Davis stated all questions about the bid process or project related questions should be directed to the project Professional (Calvin Abernathy of Mid-South Consulting, Inc.)
3. Mr. Davis went over the requirements for non-resident bidders. These items are presented in Paragraph 1.03 of Section 00100 of the Contract Documents.
4. Mr. Davis discussed that there will likely be 2 addendums issued for the project. Addendum No. 1 was issued on February 18, 2020 and the 2nd Addendum would likely be issued before the bid date.
5. Bid opening and award of contract procedures were discussed and bids will be received in the 14th floor conference room. Bidders could also be submitted electronically using the RFX Number 3160002443. Electronic Bidders were encouraged not to wait until the last minute to

Addendum No. 2 (Attachment A - March 5, 2020 Pre-Bid Conference Meeting Minutes and Notes)

submit bids. Electronic bid process does allow for bidders to fill out and save information prior to officially submitting the bid.

Discussion by Mr. Calvin Abernathy, Mid-South Consulting, Inc. (Engineer)

1. Mr. Abernathy advised the Ligated Damages were left out of the contract documents and would be included in Addendum No. 2.
2. The project will require a project sign and the specifics will be in the addendum. *Details of the sign can be found in Section 01500 (Addendum No. 1) and Exhibit B or Section 01900 of the original contract documents.*
3. The contract drawings (*specifically Sheets 6, 7 and 9*) show limits of construction activity and restricted boundaries. The contractor will need to coordinate activities within the restricted areas with MDOC staff.
4. The contractor will be required to provide temporary sanitary facilities for all employees at the project site.
5. The contractor will be required to provide some type of secure facility for storage of pertinent records on day-to-day operations and stormwater documentation.
6. The question was raised if the existing soils from the proposed/designated on-site borrow pit had been sampled to determine if these soils were suitable for roadway construction. Mr. Abernathy and Mr. Knight responded that the soils had not been tested but there was no evidence that the soils in the area would not be suitable for road construction. If soils in the designated borrow pit area were not suitable, an attempt would be made to locate an on-site borrow area that contained suitable soils. If the site did not contain any suitable soils, the Contractor would be given a change order to bring in off-site soils that would be suitable for road construction.
7. During project construction, on-site monthly project meetings will be conducted prior to pay requests being submitted. The Engineer shall be responsible for scheduling the meeting date and time.
8. The fence shown on the south side of the lagoon and north of the proposed sludge processing area may be taken down during construction and it must be reinstalled upon completion of the project.
9. Mr. Abernathy also advised he contactors that electrical power to the site will be by the contractor. Potable water is on site as shown on the drawings. The contractor would likewise have access to the wastewater treatment plant effluent (upstream of effluent weir) for wash down purposes. The contractor would be required to provide portable pumps, power and discharge lines.
10. Mr. Abernathy addressed that all stormwater permitting activities would be the responsibility of the contractor and that any stormwater that came into contact with sludge outside the existing lagoon would be classified as wastewater and would have to be returned to the lagoon.
11. The project time of completion is set at 180 calendar days with 10 days set up for lockdowns and rain/inclement weather. There may also be days when the Pine Belt Regional Landfill will not allow sludge disposal due to extreme wet weather conditions at the landfill which is included in the 10 days. The contractor will be paid the bid amount for the specific days they were prevented from working and the total bid value for the project will include the cost of the 10 days designated in Bid Item 3.5 of the Bid Form.

Discussions by Mr. Jason Kittrell with the MDOC (South MSCI)

Project security will be a big part of this contract. The general security guidelines include:

1. The razor wire at the Old HW 24 entrance will be removed by MDOC Maintenance staff prior to the project.
2. No one will be allowed onsite with a knife, gun, tobacco or drugs of any type.
3. Each employee (including subs) that will be on site will have a background check performed prior to accessing the project site. Any person with any type of criminal record and/or without an approved background clearance will be removed from the project site. Details and procedures of background checks will be discussed during the pre-construction conference.
4. The Contractor's designated project manager will be provided a key to the Old Highway 24 Access Gate accessing the site. The contractor's project manager must be on-site anytime any work activity is ongoing on the project site. The contractor will be responsible for returning the key to MDOC at the conclusion of the project.
5. The Old HW24 Access Gate shall be locked after each day's work and remain locked until the contractor accesses the site on the next work day.
6. The contractor shall keep all vehicles locked during the work day while onsite.
7. The contractor must secure all tools during the work day and every tool brought onsite shall leave with the contractor at the conclusion of each work day.
8. Cell phone service is very limited at the South MSCI and non-existent for some carriers.
9. MDOC Security may conduct random security checks at any time during the project.

Note: Parking is limited, bidders will be required to pass through security, the official time clock is behind reception's desk of the Woolfolk Bldg on the 14th floor, and no bids will be accepted after 2:00:00 pm.

GS# 323-016

Project Name: Water & Wastewater Improvements

Bid Date: Tuesday, March 17, 2020 2:00pm Woolfolk Building 14th Floor

PRE-BID AGENDA INSTRUCTIONS TO BIDDERS

SECTION 00100

PART 1 - GENERAL

- 1.01 **QUESTIONS:** Questions should be directed to the Professional. Should a Bidder find discrepancies in or omissions from, the Drawings or Project Manual, or be in doubt as to their meaning, the Bidder should immediately notify the Professional. The Professional will send written instruction(s) or interpretation(s) to all known holders of the documents. Neither the Owner, nor the Professional, will be responsible for any oral instruction or interpretation.
- 1.03 **NON-RESIDENT BIDDER:** When a non-resident Bidder (a Contractor whose principal place of business is outside the State of Mississippi) submits a bid for a Mississippi public works project, one of the following is required and shall be submitted with the Proposal Form:
- A. Copy of Law: If the non-resident Bidder's state has a resident Bidder preference law, a copy of that law shall be submitted with the Proposal Form.
 - B. Statement: If the state has no such law then a statement indicating *the State of (Name of State) has non-resident Contractor preference law* shall be submitted with the Proposal Form.
- 1.08 **OBLIGATION OF BIDDER:** At tile bid opening, each Bidder will be presumed to have inspected the site, read and become thoroughly familiar with the Drawings and the Project Manual, including all addenda.

PART 2- PROPOSAL FORM

- 2.02 **PROPOSAL FORMS:** The Bidder shall make all proposals on forms provided and shall fill all applicable blank spaces without interlineations or alteration and must not contain recapitulation of the work to be done. No oral or telegraphic proposals will be considered.
- *Make sure your name at Secretary of State and Contractor's Board match.*
- 2.06 **ADDENDA:** Any addenda to the Drawings or Project Manual issued before or during the time of bidding shall be included in the proposal and become a part of the Contract. The Proposal Form will have ample space to indicate the receipt of addenda. When completing the Proposal Form, the Bidder shall list the Addendum number and the date received in spaces provided.
- *Note that all addenda's will be issued NO LATER THAN (48) forty-eight hrs before bid time.*
 - *Ask Professional if any addenda's are planned.*

PART 4 - BID OPENING AND AWARD OF CONTRACT

- 4.03 **PROTEST:** Any protest must be delivered in writing to the Owner within twenty-four (24) hours after the bid opening.
- *Do not send any protest or errors to the project professional, both must be sent to Owner.*
- 4.04 **ERRORS:** Any claim of error and request for release from bid must be delivered in writing to the Owner within twenty-four (24) hours after the bid opening. The Bidder shall provide sufficient documentation with the written request clearly proving an error was made.

Division 0

PRE-BID MEETING FOR

GS# 323-016

Title: Water & Wastewater Improvements

Location: South MS Correctional Institution

Bid Date: Tuesday, March 17, 2020 2:00pm

- 1) Location: 14th floor - Bureau of Buildings Conference Room
- 2) Parking: Allow time for parking if the legislature is in session. Check-in through security.
- 3) Please follow signage that is in place on bid day.
- 4) Please sign in when you arrive. The time at the secretary's desk is the official time clock.
- 5) Bids are received until 2:00pm (see note 4)
- 6) If bid is requested back for changes after it has been stamped in, it must be re-stamped when re-submitting. Changes are allowed to the exterior of the sealed bid only
- 7) Electronic bids will be accepted from registered users. **If bidding electronically you will need this RFX Number 3160003443.** For Complete Instructions:
<http://www.dfa.ms.gov/media/6587/022718-electronic-bidding-for-professionals-to-contractors.pdf>
- 8) Bid Envelope must include the following:
 - GC's Name as listed with the Secretary of State's office
 - Certificate of Responsibility Number (COR)
- 9) Information found on Bid Bond:
 - Name of Bonding/Surety Company
 - Bond/Surety Amount of 5%
- 10) Power of Attorney must be signed and attached
- 11) Information found on Proposal Form
 - Addenda Acknowledgement
 - Base Bid – The B.O.B. will only acknowledge the written out bid amount, not the listed \$0.00.
 - Number of Contract Days must be filled in
 - Mechanical Contractor, Plumbing Contractor, Electrical Contractor must be filled in (to include COR#) ***even if your company is completing the work.***
- 12) Certified checks will be held until award
- 13) If you are the apparent low bidder, you have 24 hours (from the 2:00 bid time) to review as well as protest bids.
- 14) You must honor pricing for 45 days as per specifications
- 15) Notice to proceed will be around 5 weeks.

ANALYTICAL REPORT

September 11, 2019

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

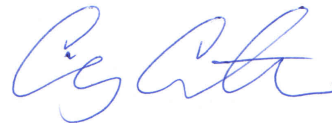
9 Sc

FC & E Engineering

Sample Delivery Group: L1134797
Samples Received: 08/30/2019
Project Number:
Description: SMCI

Report To: Mr. Jeremy Smith
917 Marquette Road
Brandon, MS 39042

Entire Report Reviewed By:



Craig Cothron
Project Manager

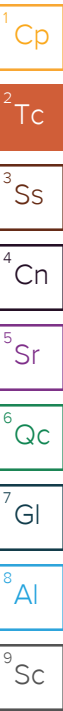
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory 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.



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SAMPLE SUMMARY

Section 02610 (Addendum No. 2)

Exhibit A - Sludge Testing Results from Pace Analytical

September 11, 2019

1 L1134797-01 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1339636	1	09/04/19 11:07	09/04/19 11:07	CGD	Mt. Juliet, TN
Preparation by Method 1311	WG1340401	1	09/05/19 11:03	09/05/19 11:03	RT	Mt. Juliet, TN
Wet Chemistry by Method 9012 B	WG1338963	1	09/03/19 10:29	09/03/19 16:33	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9034-9030B	WG1340029	1	09/05/19 18:00	09/05/19 18:00	BAM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1339230	1	09/04/19 07:50	09/04/19 11:55	MSP	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG1340019	1	09/10/19 20:23	09/10/19 20:23	NJM	Mt. Juliet, TN
Mercury by Method 7470A	WG1341308	1	09/08/19 19:00	09/09/19 10:05	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1341387	1	09/06/19 23:05	09/07/19 08:48	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1340482	1	09/06/19 01:55	09/06/19 01:55	HJF	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1341317	1	09/06/19 15:34	09/08/19 11:21	LEL	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1341428	1	09/08/19 09:33	09/10/19 13:30	LEL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1341403	1	09/08/19 08:24	09/09/19 03:56	AO	Mt. Juliet, TN

Collected by
Collected date/time
Received date/time
08/29/19 12:30 08/30/19 09:00

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

3 L1134797-02 Waste

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Preparation by Method 1311	WG1339636	1	09/04/19 11:07	09/04/19 11:07	CGD	Mt. Juliet, TN
Preparation by Method 1311	WG1340401	1	09/05/19 11:03	09/05/19 11:03	RT	Mt. Juliet, TN
Wet Chemistry by Method 9012 B	WG1338963	1	09/03/19 10:29	09/03/19 16:36	SDL	Mt. Juliet, TN
Wet Chemistry by Method 9034-9030B	WG1340029	1	09/05/19 18:00	09/05/19 18:00	BAM	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1339396	1	09/03/19 22:49	09/04/19 00:04	ANP	Mt. Juliet, TN
Wet Chemistry by Method D93/1010A	WG1340019	1	09/10/19 20:23	09/10/19 20:23	NJM	Mt. Juliet, TN
Mercury by Method 7470A	WG1341308	1	09/08/19 19:00	09/09/19 10:07	ABL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1341387	1	09/06/19 23:05	09/07/19 08:56	TRB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1340482	1	09/06/19 02:15	09/06/19 02:15	HJF	Mt. Juliet, TN
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1341317	1	09/06/19 15:34	09/08/19 11:35	LEL	Mt. Juliet, TN
Pesticides (GC) by Method 8081B	WG1341428	1	09/08/19 09:33	09/10/19 13:43	LEL	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG1341403	1	09/08/19 08:24	09/09/19 04:16	AO	Mt. Juliet, TN

Collected by
Collected date/time
Received date/time
08/29/19 13:30 08/30/19 09:00

1 L1134797-03 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Pesticides (GC) by Method 8081	WG1340615	1	09/05/19 20:56	09/06/19 18:04	RP	Mt. Juliet, TN

Collected by
Collected date/time
Received date/time
08/29/19 12:30 08/30/19 09:00

3 L1134797-04 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Pesticides (GC) by Method 8081	WG1340615	14.7	09/05/19 20:56	09/06/19 18:16	RP	Mt. Juliet, TN

Collected by
Collected date/time
Received date/time
08/29/19 13:30 08/30/19 09:00

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.

Craig Cothron
Project Manager

Project Narrative

All Reactive Cyanide results reported in the attached report were determined as totals using method 9012B.

All Reactive Sulfide results reported in the attached report were determined as totals using method 9034/9030B.

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	-		9/5/2019 11:03:08 AM	WG1340401
TCLP ZHE Extraction	-		9/4/2019 11:07:09 AM	WG1339636
Fluid	1		9/5/2019 11:03:08 AM	WG1340401
Initial pH	7.14		9/5/2019 11:03:08 AM	WG1340401
Final pH	5.03		9/5/2019 11:03:08 AM	WG1340401

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND	J6	0.250	1	09/03/2019 16:33	WG1338963

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	ND		25.0	1	09/05/2019 18:00	WG1340029

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity by pH	7.08	T8	1	09/04/2019 11:55	WG1339230

Sample Narrative:

L1134797-01 WG1339230: 7.08 at 24.8C

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170		1	09/10/2019 20:23	WG1340019

Mercury by Method 7470A

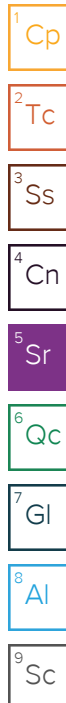
Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	09/09/2019 10:05	WG1341308

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	09/07/2019 08:48	WG1341387
Barium	0.170		0.100	100	1	09/07/2019 08:48	WG1341387
Cadmium	ND		0.100	1	1	09/07/2019 08:48	WG1341387
Chromium	ND		0.100	5	1	09/07/2019 08:48	WG1341387
Lead	ND		0.100	5	1	09/07/2019 08:48	WG1341387
Selenium	ND		0.100	1	1	09/07/2019 08:48	WG1341387
Silver	ND		0.100	5	1	09/07/2019 08:48	WG1341387

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	09/06/2019 01:55	WG1340482
Carbon tetrachloride	ND		0.0500	0.50	1	09/06/2019 01:55	WG1340482
Chlorobenzene	ND		0.0500	100	1	09/06/2019 01:55	WG1340482
Chloroform	ND		0.250	6	1	09/06/2019 01:55	WG1340482





Collected date: Section 026107 Addendum No. 2

Exhibit A - Sludge Testing Results from Pace Analytical

September 11, 2019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.0500	0.50	1	09/06/2019 01:55	WG1340482
1,1-Dichloroethene	ND		0.0500	0.70	1	09/06/2019 01:55	WG1340482
2-Butanone (MEK)	ND		0.500	200	1	09/06/2019 01:55	WG1340482
Tetrachloroethene	ND		0.0500	0.70	1	09/06/2019 01:55	WG1340482
Trichloroethene	ND		0.0500	0.50	1	09/06/2019 01:55	WG1340482
Vinyl chloride	ND		0.0500	0.20	1	09/06/2019 01:55	WG1340482
(S) Toluene-d8	101		80.0-120			09/06/2019 01:55	WG1340482
(S) 4-Bromofluorobenzene	95.3		77.0-126			09/06/2019 01:55	WG1340482
(S) 1,2-Dichloroethane-d4	91.3		70.0-130			09/06/2019 01:55	WG1340482

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	ND		0.00200	1	1	09/08/2019 11:21	WG1341317
2,4-D	ND		0.00200	10	1	09/08/2019 11:21	WG1341317
(S) 2,4-Dichlorophenyl Acetic Acid	63.8		14.0-158			09/08/2019 11:21	WG1341317

6 Qc

7 Gl

8 Al

Pesticides (GC) by Method 8081B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Chlordane	ND		0.00500	0.03	1	09/10/2019 13:30	WG1341428
Endrin	ND		0.00500	0.02	1	09/10/2019 13:30	WG1341428
Heptachlor	ND		0.00500	0.0080	1	09/10/2019 13:30	WG1341428
Lindane	ND		0.00500	0.40	1	09/10/2019 13:30	WG1341428
Methoxychlor	ND		0.00500	10	1	09/10/2019 13:30	WG1341428
Toxaphene	ND		0.0100	0.50	1	09/10/2019 13:30	WG1341428
(S) Decachlorobiphenyl	106		10.0-128			09/10/2019 13:30	WG1341428
(S) Tetrachloro-m-xylene	69.8		10.0-127			09/10/2019 13:30	WG1341428

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	ND		0.100	7.50	1	09/09/2019 03:56	WG1341403
2,4-Dinitrotoluene	ND		0.100	0.13	1	09/09/2019 03:56	WG1341403
Hexachlorobenzene	ND		0.100	0.13	1	09/09/2019 03:56	WG1341403
Hexachloro-1,3-butadiene	ND		0.100	0.50	1	09/09/2019 03:56	WG1341403
Hexachloroethane	ND		0.100	3	1	09/09/2019 03:56	WG1341403
Nitrobenzene	ND		0.100	2	1	09/09/2019 03:56	WG1341403
Pyridine	ND		0.100	5	1	09/09/2019 03:56	WG1341403
3&4-Methyl Phenol	ND		0.100	400	1	09/09/2019 03:56	WG1341403
2-Methylphenol	ND		0.100	200	1	09/09/2019 03:56	WG1341403
Pentachlorophenol	ND		0.100	100	1	09/09/2019 03:56	WG1341403
2,4,5-Trichlorophenol	ND		0.100	400	1	09/09/2019 03:56	WG1341403
2,4,6-Trichlorophenol	ND		0.100	2	1	09/09/2019 03:56	WG1341403
(S) 2-Fluorophenol	16.6		10.0-120			09/09/2019 03:56	WG1341403
(S) Phenol-d5	12.0		10.0-120			09/09/2019 03:56	WG1341403
(S) Nitrobenzene-d5	37.5		10.0-127			09/09/2019 03:56	WG1341403
(S) 2-Fluorobiphenyl	36.1		10.0-130			09/09/2019 03:56	WG1341403
(S) 2,4,6-Tribromophenol	51.0		10.0-155			09/09/2019 03:56	WG1341403
(S) p-Terphenyl-d14	61.4		10.0-128			09/09/2019 03:56	WG1341403



Collected date: 09/11/2019

Section: 026101 (Addendum No. 2)

Exhibit A - Sludge Testing Results from Pace Analytical

September 11, 2019

Preparation by Method 1311

Analyte	Result	Qualifier	Prep date / time	Batch
TCLP Extraction	-		9/5/2019 11:03:08 AM	WG1340401
TCLP ZHE Extraction	-		9/4/2019 11:07:09 AM	WG1339636
Fluid	1		9/5/2019 11:03:08 AM	WG1340401
Initial pH	6.85		9/5/2019 11:03:08 AM	WG1340401
Final pH	4.98		9/5/2019 11:03:08 AM	WG1340401

Wet Chemistry by Method 9012 B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Cyanide	ND		0.250	1	09/03/2019 16:36	WG1338963

Wet Chemistry by Method 9034-9030B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Reactive Sulfide	48.1		25.0	1	09/05/2019 18:00	WG1340029

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
Corrosivity by pH	6.62	<u>T8</u>	1	09/04/2019 00:04	WG1339396

Sample Narrative:

L1134797-02 WG1339396: 6.62 at 23.4C

Wet Chemistry by Method D93/1010A

Analyte	Result Deg. F	Qualifier	Dilution	Analysis date / time	Batch
Ignitability	DNI at 170		1	09/10/2019 20:23	WG1340019

Mercury by Method 7470A

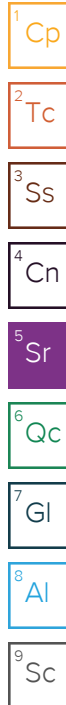
Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Mercury	ND		0.0100	0.20	1	09/09/2019 10:07	WG1341308

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Arsenic	ND		0.100	5	1	09/07/2019 08:56	WG1341387
Barium	0.132		0.100	100	1	09/07/2019 08:56	WG1341387
Cadmium	ND		0.100	1	1	09/07/2019 08:56	WG1341387
Chromium	ND		0.100	5	1	09/07/2019 08:56	WG1341387
Lead	ND		0.100	5	1	09/07/2019 08:56	WG1341387
Selenium	ND		0.100	1	1	09/07/2019 08:56	WG1341387
Silver	ND		0.100	5	1	09/07/2019 08:56	WG1341387

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Benzene	ND		0.0500	0.50	1	09/06/2019 02:15	WG1340482
Carbon tetrachloride	ND		0.0500	0.50	1	09/06/2019 02:15	WG1340482
Chlorobenzene	ND		0.0500	100	1	09/06/2019 02:15	WG1340482
Chloroform	ND		0.250	6	1	09/06/2019 02:15	WG1340482





Collected date: Section 02910 Addendum No. 2

Exhibit A - Sludge Testing Results from Pace Analytical

September 11, 2019

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		0.0500	0.50	1	09/06/2019 02:15	WG1340482
1,1-Dichloroethene	ND		0.0500	0.70	1	09/06/2019 02:15	WG1340482
2-Butanone (MEK)	ND		0.500	200	1	09/06/2019 02:15	WG1340482
Tetrachloroethene	ND		0.0500	0.70	1	09/06/2019 02:15	WG1340482
Trichloroethene	ND		0.0500	0.50	1	09/06/2019 02:15	WG1340482
Vinyl chloride	ND		0.0500	0.20	1	09/06/2019 02:15	WG1340482
(S) Toluene-d8	92.7		80.0-120			09/06/2019 02:15	WG1340482
(S) 4-Bromofluorobenzene	100		77.0-126			09/06/2019 02:15	WG1340482
(S) 1,2-Dichloroethane-d4	93.4		70.0-130			09/06/2019 02:15	WG1340482

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Chlorinated Acid Herbicides (GC) by Method 8151A

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
2,4,5-TP (Silvex)	ND		0.00200	1	1	09/08/2019 11:35	WG1341317
2,4-D	ND		0.00200	10	1	09/08/2019 11:35	WG1341317
(S) 2,4-Dichlorophenyl Acetic Acid	61.4		14.0-158			09/08/2019 11:35	WG1341317

6 Qc

7 Gl

8 Al

Pesticides (GC) by Method 8081B

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
Chlordane	ND		0.00500	0.03	1	09/10/2019 13:43	WG1341428
Endrin	ND		0.00500	0.02	1	09/10/2019 13:43	WG1341428
Heptachlor	ND		0.00500	0.0080	1	09/10/2019 13:43	WG1341428
Lindane	ND		0.00500	0.40	1	09/10/2019 13:43	WG1341428
Methoxychlor	ND		0.00500	10	1	09/10/2019 13:43	WG1341428
Toxaphene	ND		0.0100	0.50	1	09/10/2019 13:43	WG1341428
(S) Decachlorobiphenyl	93.3		10.0-128			09/10/2019 13:43	WG1341428
(S) Tetrachloro-m-xylene	64.1		10.0-127			09/10/2019 13:43	WG1341428

9 Sc

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result mg/l	Qualifier	RDL mg/l	Limit mg/l	Dilution	Analysis date / time	Batch
1,4-Dichlorobenzene	ND		0.100	7.50	1	09/09/2019 04:16	WG1341403
2,4-Dinitrotoluene	ND		0.100	0.13	1	09/09/2019 04:16	WG1341403
Hexachlorobenzene	ND		0.100	0.13	1	09/09/2019 04:16	WG1341403
Hexachloro-1,3-butadiene	ND		0.100	0.50	1	09/09/2019 04:16	WG1341403
Hexachloroethane	ND		0.100	3	1	09/09/2019 04:16	WG1341403
Nitrobenzene	ND		0.100	2	1	09/09/2019 04:16	WG1341403
Pyridine	ND		0.100	5	1	09/09/2019 04:16	WG1341403
3&4-Methyl Phenol	ND		0.100	400	1	09/09/2019 04:16	WG1341403
2-Methylphenol	ND		0.100	200	1	09/09/2019 04:16	WG1341403
Pentachlorophenol	ND		0.100	100	1	09/09/2019 04:16	WG1341403
2,4,5-Trichlorophenol	ND		0.100	400	1	09/09/2019 04:16	WG1341403
2,4,6-Trichlorophenol	ND		0.100	2	1	09/09/2019 04:16	WG1341403
(S) 2-Fluorophenol	23.3		10.0-120			09/09/2019 04:16	WG1341403
(S) Phenol-d5	16.0		10.0-120			09/09/2019 04:16	WG1341403
(S) Nitrobenzene-d5	45.7		10.0-127			09/09/2019 04:16	WG1341403
(S) 2-Fluorobiphenyl	46.8		10.0-130			09/09/2019 04:16	WG1341403
(S) 2,4,6-Tribromophenol	64.0		10.0-155			09/09/2019 04:16	WG1341403
(S) p-Terphenyl-d14	70.9		10.0-128			09/09/2019 04:16	WG1341403



Collected date: 09/06/2019

Section 02610 (Addendum No. 2)

Exhibit A - Sludge Testing Results from Pace Analytical

September 11, 2019

Additional Information

Analyte	Result	Units
pH (On Site)	7.02	su

Pesticides (GC) by Method 8081

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Aldrin	U		0.00135	0.0200	1	09/06/2019 18:04	WG1340615
Alpha BHC	U		0.00136	0.0200	1	09/06/2019 18:04	WG1340615
Beta BHC	U		0.00160	0.0200	1	09/06/2019 18:04	WG1340615
Delta BHC	U		0.00143	0.0200	1	09/06/2019 18:04	WG1340615
Gamma BHC	U		0.00145	0.0200	1	09/06/2019 18:04	WG1340615
Chlordane	U		0.0390	0.200	1	09/06/2019 18:04	WG1340615
4,4-DDD	U		0.00156	0.0200	1	09/06/2019 18:04	WG1340615
4,4-DDE	U		0.00154	0.0200	1	09/06/2019 18:04	WG1340615
4,4-DDT	U		0.00200	0.0200	1	09/06/2019 18:04	WG1340615
Dieldrin	U		0.00152	0.0200	1	09/06/2019 18:04	WG1340615
Endosulfan I	U		0.00149	0.0200	1	09/06/2019 18:04	WG1340615
Endosulfan II	U		0.00160	0.0200	1	09/06/2019 18:04	WG1340615
Endosulfan sulfate	U		0.00151	0.0200	1	09/06/2019 18:04	WG1340615
Endrin	U		0.00157	0.0200	1	09/06/2019 18:04	WG1340615
Endrin aldehyde	U		0.00129	0.0200	1	09/06/2019 18:04	WG1340615
Endrin ketone	U		0.00165	0.0200	1	09/06/2019 18:04	WG1340615
Hexachlorobenzene	U		0.00124	0.0200	1	09/06/2019 18:04	WG1340615
Heptachlor	U		0.00154	0.0200	1	09/06/2019 18:04	WG1340615
Heptachlor epoxide	U		0.00161	0.0200	1	09/06/2019 18:04	WG1340615
Methoxychlor	U		0.00178	0.0200	1	09/06/2019 18:04	WG1340615
Toxaphene	U		0.0360	0.400	1	09/06/2019 18:04	WG1340615
(S) Decachlorobiphenyl	114			10.0-135		09/06/2019 18:04	WG1340615
(S) Tetrachloro-m-xylene	92.5			10.0-139		09/06/2019 18:04	WG1340615

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Additional Information

Analyte	Result	Units
pH (On Site)	6.53	su

Pesticides (GC) by Method 8081

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Aldrin	U		0.0198	0.294	14.7	09/06/2019 18:16	WG1340615
Alpha BHC	U		0.0200	0.294	14.7	09/06/2019 18:16	WG1340615
Beta BHC	U		0.0235	0.294	14.7	09/06/2019 18:16	WG1340615
Delta BHC	U		0.0210	0.294	14.7	09/06/2019 18:16	WG1340615
Gamma BHC	U		0.0213	0.294	14.7	09/06/2019 18:16	WG1340615
Chlordane	U		0.573	2.94	14.7	09/06/2019 18:16	WG1340615
4,4-DDD	U		0.0229	0.294	14.7	09/06/2019 18:16	WG1340615
4,4-DDE	U		0.0226	0.294	14.7	09/06/2019 18:16	WG1340615
4,4-DDT	U		0.0294	0.294	14.7	09/06/2019 18:16	WG1340615
Dieldrin	U		0.0223	0.294	14.7	09/06/2019 18:16	WG1340615
Endosulfan I	U		0.0219	0.294	14.7	09/06/2019 18:16	WG1340615
Endosulfan II	U		0.0235	0.294	14.7	09/06/2019 18:16	WG1340615
Endosulfan sulfate	U		0.0222	0.294	14.7	09/06/2019 18:16	WG1340615
Endrin	U		0.0231	0.294	14.7	09/06/2019 18:16	WG1340615
Endrin aldehyde	U		0.0190	0.294	14.7	09/06/2019 18:16	WG1340615
Endrin ketone	U		0.0243	0.294	14.7	09/06/2019 18:16	WG1340615
Hexachlorobenzene	U		0.0182	0.294	14.7	09/06/2019 18:16	WG1340615
Heptachlor	U		0.0226	0.294	14.7	09/06/2019 18:16	WG1340615
Heptachlor epoxide	U		0.0237	0.294	14.7	09/06/2019 18:16	WG1340615
Methoxychlor	U		0.0262	0.294	14.7	09/06/2019 18:16	WG1340615
Toxaphene	U		0.529	5.88	14.7	09/06/2019 18:16	WG1340615
(S) Decachlorobiphenyl	101			10.0-135		09/06/2019 18:16	WG1340615
(S) Tetrachloro-m-xylene	80.4			10.0-139		09/06/2019 18:16	WG1340615

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3446837-1 09/03/19 16:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Reactive Cyanide	U		0.0390	0.250

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1134215-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1134215-01 09/03/19 16:22 • (DUP) R3446837-3 09/03/19 16:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Reactive Cyanide	ND	0.0869	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3446837-2 09/03/19 16:17

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Reactive Cyanide	2.50	2.78	111	50.0-150	

L1134797-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134797-01 09/03/19 16:33 • (MS) R3446837-4 09/03/19 16:34 • (MSD) R3446837-5 09/03/19 16:35

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Reactive Cyanide	1.67	ND	1.09	1.18	65.7	71.1	1	75.0-125	J6	J6	7.80	20

L1135099-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1135099-01 09/03/19 16:47 • (MS) R3446837-6 09/03/19 16:48 • (MSD) R3446837-7 09/03/19 16:49

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Reactive Cyanide	1.67	ND	0.894	1.18	44.3	61.6	1	75.0-125	J6	J3 J6	27.8	20



Method Blank (MB)

(MB) R3447686-1 09/05/19 18:00

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Reactive Sulfide	U		7.63	25.0

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

L1133581-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1133581-02 09/05/19 18:00 • (DUP) R3447686-3 09/05/19 18:00

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Reactive Sulfide	59.3	59.4	1	0.157		20

Laboratory Control Sample (LCS)

(LCS) R3447686-2 09/05/19 18:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Reactive Sulfide	100	95.7	95.7	70.0-130	

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS)

(LCS) R3447035-1 09/04/19 11:55

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	su	su	%	%	
Corrosivity by pH	10.0	9.96	99.6	99.0-101	

Sample Narrative:
LCS: 9.96 at 21.7C

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L1134797-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1134797-02 09/04/19 00:04 • (DUP) R3446911-2 09/04/19 00:04

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Corrosivity by pH	6.62	6.67	1	0.752		1

Sample Narrative:

OS: 6.62 at 23.4C
DUP: 6.67 at 24.8C

Laboratory Control Sample (LCS)

(LCS) R3446911-1 09/04/19 00:04

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Corrosivity by pH	10.0	9.98	99.8	99.0-101	

Sample Narrative:

LCS: 9.98 at 21.4C

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L1133578-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1133578-02 09/10/19 20:23 • (DUP) R3449221-2 09/10/19 20:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	Deg. F	Deg. F		%		%
Ignitability	DNI at 170	DNI at 170	1	0.000		10

1 Cp

2 Tc

3 Ss

L1135099-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1135099-01 09/10/19 20:23 • (DUP) R3449221-3 09/10/19 20:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	Deg. F	Deg. F		%		%
Ignitability	DNI at 170	DNI at 170	1	0.000		10

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R3449221-1 09/10/19 20:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	Deg. F	Deg. F	%	%	
Ignitability	82.0	81.4	99.3	96.0-104	

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3448597-1 09/09/19 09:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Mercury	U		0.00330	0.0100

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3448597-2 09/09/19 09:43 • (LCSD) R3448597-3 09/09/19 09:45

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Mercury	0.0300	0.0297	0.0296	99.0	98.7	80.0-120			0.337	20

L1134526-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134526-01 09/09/19 09:47 • (MS) R3448597-4 09/09/19 09:50 • (MSD) R3448597-5 09/09/19 09:52

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Mercury	0.0300	ND	0.0300	0.0290	100	96.7	1	75.0-125			3.39	20

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3448174-1 09/07/19 08:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Arsenic	U		0.0330	0.100
Barium	U		0.0330	0.100
Cadmium	U		0.0330	0.100
Chromium	U		0.0330	0.100
Lead	U		0.0330	0.100
Selenium	U		0.0330	0.100
Silver	U		0.0330	0.100



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3448174-2 09/07/19 08:27 • (LCSD) R3448174-3 09/07/19 08:29

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Arsenic	10.0	9.75	9.87	97.5	98.7	80.0-120			1.24	20
Barium	10.0	10.0	10.2	100	102	80.0-120			1.44	20
Cadmium	10.0	9.68	9.83	96.8	98.3	80.0-120			1.56	20
Chromium	10.0	9.58	9.72	95.8	97.2	80.0-120			1.41	20
Lead	10.0	9.89	10.0	98.9	100	80.0-120			1.34	20
Selenium	10.0	9.89	10.0	98.9	100	80.0-120			1.12	20
Silver	2.00	1.81	1.83	90.3	91.3	80.0-120			1.10	20



L1134526-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134526-01 09/07/19 08:32 • (MS) R3448174-5 09/07/19 08:37 • (MSD) R3448174-6 09/07/19 08:40

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	%	%		%			%	%
Arsenic	10.0	ND	9.85	9.90	98.5	99.0	1	75.0-125			0.461	20
Barium	10.0	ND	10.1	10.2	99.7	101	1	75.0-125			0.877	20
Cadmium	10.0	ND	9.75	9.81	97.5	98.1	1	75.0-125			0.628	20
Chromium	10.0	ND	9.60	9.67	96.0	96.7	1	75.0-125			0.698	20
Lead	10.0	ND	9.90	9.92	99.0	99.2	1	75.0-125			0.224	20
Selenium	10.0	ND	10.0	10.1	99.8	100	1	75.0-125			0.195	20
Silver	2.00	ND	1.82	1.83	90.9	91.4	1	75.0-125			0.571	20



Method Blank (MB)

(MB) R3447943-3 09/05/19 20:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0165	0.0500
Carbon tetrachloride	U		0.0165	0.0500
Chlorobenzene	U		0.0165	0.0500
Chloroform	U		0.0825	0.250
1,2-Dichloroethane	U		0.0165	0.0500
1,1-Dichloroethene	U		0.0165	0.0500
2-Butanone (MEK)	U		0.165	0.500
Tetrachloroethene	U		0.0165	0.0500
Trichloroethene	U		0.0165	0.0500
Vinyl chloride	U		0.0165	0.0500
(S) Toluene-d8	99.0			80.0-120
(S) 4-Bromofluorobenzene	103			77.0-126
(S) 1,2-Dichloroethane-d4	93.3			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3447943-1 09/05/19 17:11 • (LCSD) R3447943-2 09/05/19 17:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.0250	0.0243	0.0246	97.3	98.2	70.0-123			0.951	20
Carbon tetrachloride	0.0250	0.0249	0.0248	99.5	99.2	68.0-126			0.351	20
Chlorobenzene	0.0250	0.0243	0.0256	97.3	102	80.0-121			5.02	20
Chloroform	0.0250	0.0237	0.0239	94.6	95.5	73.0-120			0.882	20
1,2-Dichloroethane	0.0250	0.0212	0.0212	85.0	85.0	70.0-128			0.00112	20
1,1-Dichloroethene	0.0250	0.0236	0.0236	94.5	94.2	71.0-124			0.260	20
2-Butanone (MEK)	0.125	0.0941	0.0959	75.3	76.7	44.0-160			1.87	20
Tetrachloroethene	0.0250	0.0257	0.0271	103	108	72.0-132			4.99	20
Trichloroethene	0.0250	0.0270	0.0274	108	110	78.0-124			1.61	20
Vinyl chloride	0.0250	0.0246	0.0249	98.3	99.5	67.0-131			1.22	20
(S) Toluene-d8				94.3	96.2	80.0-120				
(S) 4-Bromofluorobenzene				104	100	77.0-126				
(S) 1,2-Dichloroethane-d4				91.4	94.3	70.0-130				



Method Blank (MB)

(MB) R3448402-1 09/08/19 09:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
2,4-D	U		0.000667	0.00200
2,4,5-TP (Silvex)	U		0.000667	0.00200
(S) 2,4-Dichlorophenyl Acetic Acid	70.0			14.0-158

Laboratory Control Sample (LCS)

(LCS) R3448402-2 09/08/19 10:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
2,4-D	0.0500	0.0397	79.4	50.0-120	
2,4,5-TP (Silvex)	0.0500	0.0446	89.2	50.0-125	
(S) 2,4-Dichlorophenyl Acetic Acid			75.0	14.0-158	

L1135035-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1135035-02 09/08/19 12:17 • (MS) R3448402-3 09/08/19 12:31 • (MSD) R3448402-4 09/08/19 12:45

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-D	0.0500	ND	0.0391	0.0389	78.2	77.8	1	50.0-120			0.513	20
2,4,5-TP (Silvex)	0.0500	ND	0.0432	0.0426	86.4	85.2	1	50.0-125			1.40	20
(S) 2,4-Dichlorophenyl Acetic Acid					72.8	71.6		14.0-158				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3448167-1 09/06/19 15:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	107			10.0-135
(S) Tetrachloro-m-xylene	83.5			10.0-139

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3448167-2 09/06/19 15:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Aldrin	0.0666	0.0621	93.2	34.0-136	
Alpha BHC	0.0666	0.0659	98.9	34.0-139	
Beta BHC	0.0666	0.0615	92.3	34.0-133	
Delta BHC	0.0666	0.0656	98.5	34.0-135	
Gamma BHC	0.0666	0.0668	100	34.0-136	
4,4-DDD	0.0666	0.0652	97.9	33.0-141	
4,4-DDE	0.0666	0.0662	99.4	34.0-134	
4,4-DDT	0.0666	0.0722	108	30.0-143	
Dieldrin	0.0666	0.0631	94.7	35.0-137	
Endosulfan I	0.0666	0.0637	95.6	34.0-134	



Laboratory Control Sample (LCS)

(LCS) R3448167-2 09/06/19 15:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Endosulfan II	0.0666	0.0636	95.5	35.0-132	
Endosulfan sulfate	0.0666	0.0654	98.2	35.0-132	
Endrin	0.0666	0.0635	95.3	34.0-137	
Endrin aldehyde	0.0666	0.0557	83.6	23.0-121	
Endrin ketone	0.0666	0.0760	114	35.0-144	
Heptachlor	0.0666	0.0698	105	36.0-141	
Heptachlor epoxide	0.0666	0.0638	95.8	36.0-134	
Hexachlorobenzene	0.0666	0.0680	102	33.0-129	
Methoxychlor	0.0666	0.0693	104	28.0-150	
(S) Decachlorobiphenyl			119	10.0-135	
(S) Tetrachloro-m-xylene			95.5	10.0-139	

L1134784-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1134784-06 09/06/19 16:37 • (MS) R3448167-3 09/06/19 16:49 • (MSD) R3448167-4 09/06/19 17:02

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	0.0725	U	0.0469	0.0557	64.7	76.9	1	20.0-135			17.2	37
Alpha BHC	0.0725	U	0.0502	0.0592	69.2	81.7	1	27.0-140			16.5	35
Beta BHC	0.0725	U	0.0479	0.0561	66.1	77.3	1	23.0-141			15.7	37
Delta BHC	0.0725	U	0.0478	0.0569	65.9	78.5	1	21.0-138			17.5	35
Gamma BHC	0.0725	U	0.0510	0.0602	70.3	83.0	1	27.0-137			16.7	36
4,4-DDD	0.0725	U	0.0501	0.0594	69.1	82.0	1	15.0-152			17.1	39
4,4-DDE	0.0725	U	0.0511	0.0601	70.4	82.9	1	10.0-152			16.3	40
4,4-DDT	0.0725	U	0.0582	0.0678	80.3	93.5	1	10.0-151			15.2	40
Dieldrin	0.0725	U	0.0483	0.0572	66.7	78.8	1	17.0-145			16.7	37
Endosulfan I	0.0725	U	0.0482	0.0577	66.5	79.6	1	20.0-137			17.9	36
Endosulfan II	0.0725	U	0.0487	0.0575	67.1	79.3	1	15.0-141			16.6	37
Endosulfan sulfate	0.0725	U	0.0505	0.0592	69.7	81.7	1	15.0-143			15.9	38
Endrin	0.0725	U	0.0490	0.0587	67.6	80.9	1	19.0-143			18.0	37
Endrin aldehyde	0.0725	U	0.0471	0.0547	65.0	75.4	1	10.0-139			14.8	40
Endrin ketone	0.0725	U	0.0576	0.0678	79.4	93.5	1	17.0-149			16.3	38
Heptachlor	0.0725	U	0.0519	0.0623	71.6	85.9	1	22.0-138			18.1	37
Heptachlor epoxide	0.0725	U	0.0490	0.0578	67.6	79.7	1	22.0-138			16.5	36
Hexachlorobenzene	0.0725	U	0.0520	0.0621	71.8	85.6	1	25.0-126			17.6	35
Methoxychlor	0.0725	U	0.0545	0.0634	75.2	87.4	1	10.0-159			15.0	40
(S) Decachlorobiphenyl					80.2	90.1		10.0-135				
(S) Tetrachloro-m-xylene					61.9	71.5		10.0-139				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3448996-2 09/10/19 10:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Gamma BHC	U		0.00167	0.00500
Endrin	U		0.00167	0.00500
Heptachlor	U		0.00167	0.00500
Methoxychlor	U		0.00167	0.00500
Chlordane	U		0.00167	0.00500
Toxaphene	U		0.00333	0.0100
(S) Decachlorobiphenyl	77.7			10.0-128
(S) Tetrachloro-m-xylene	56.7			10.0-127

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

Laboratory Control Sample (LCS)

(LCS) R3448996-1 09/10/19 09:54

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
Gamma BHC	0.0100	0.00961	96.1	55.0-129	
Endrin	0.0100	0.00978	97.8	57.0-134	
Heptachlor	0.0100	0.00950	95.0	27.0-132	
Methoxychlor	0.0100	0.0105	105	54.0-155	
(S) Decachlorobiphenyl			95.6	10.0-128	
(S) Tetrachloro-m-xylene			77.4	10.0-127	

7 Gl

8 Al

9 Sc

L1133573-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1133573-01 09/10/19 10:49 • (MS) R3448996-3 09/10/19 11:01 • (MSD) R3448996-4 09/10/19 11:14

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	%	%		%			%	%
Gamma BHC	0.0100	ND	0.00933	0.0105	93.3	105	1	14.0-141			11.8	40
Endrin	0.0100	ND	0.0101	0.0114	101	114	1	10.0-160			12.1	39
Heptachlor	0.0100	ND	0.00878	0.0104	87.8	104	1	16.0-136			16.9	40
Methoxychlor	0.0100	ND	0.0105	0.0113	105	113	1	10.0-160			7.34	34
(S) Decachlorobiphenyl					90.7	98.1		10.0-128				
(S) Tetrachloro-m-xylene					79.9	87.2		10.0-127				



Method Blank (MB)

(MB) R3448477-2 09/08/19 22:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
1,4-Dichlorobenzene	U		0.0333	0.100
2,4-Dinitrotoluene	U		0.0333	0.100
Hexachlorobenzene	U		0.0333	0.100
Hexachloro-1,3-butadiene	U		0.0333	0.100
Hexachloroethane	U		0.0333	0.100
Nitrobenzene	U		0.0333	0.100
Pyridine	U		0.0333	0.100
2-Methylphenol	U		0.0333	0.100
3&4-Methyl Phenol	U		0.0333	0.100
Pentachlorophenol	U		0.0333	0.100
2,4,5-Trichlorophenol	U		0.0333	0.100
2,4,6-Trichlorophenol	U		0.0333	0.100
(S) Nitrobenzene-d5	54.8			10.0-127
(S) 2-Fluorobiphenyl	55.1			10.0-130
(S) p-Terphenyl-d14	83.0			10.0-128
(S) Phenol-d5	20.8			10.0-120
(S) 2-Fluorophenol	30.3			10.0-120
(S) 2,4,6-Tribromophenol	76.0			10.0-155

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R3448477-1 09/08/19 21:57

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	mg/l	mg/l	%	%	
1,4-Dichlorobenzene	0.500	0.212	42.4	18.0-120	
2,4-Dinitrotoluene	0.500	0.469	93.8	49.0-124	
Hexachlorobenzene	0.500	0.436	87.2	44.0-120	
Hexachloro-1,3-butadiene	0.500	0.216	43.2	19.0-120	
Hexachloroethane	0.500	0.198	39.6	15.0-120	
Nitrobenzene	0.500	0.335	67.0	27.0-120	
Pyridine	0.500	0.217	43.4	10.0-120	
2-Methylphenol	0.500	0.291	58.2	28.0-120	
3&4-Methyl Phenol	0.500	0.322	64.4	31.0-120	
Pentachlorophenol	0.500	0.379	75.8	23.0-120	
2,4,5-Trichlorophenol	0.500	0.426	85.2	44.0-120	
2,4,6-Trichlorophenol	0.500	0.405	81.0	42.0-120	
(S) Nitrobenzene-d5			48.6	10.0-127	
(S) 2-Fluorobiphenyl			60.0	10.0-130	
(S) p-Terphenyl-d14			90.0	10.0-128	



Laboratory Control Sample (LCS)

(LCS) R3448477-1 09/08/19 21:57

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) Phenol-d5			22.1	10.0-120	
(S) 2-Fluorophenol			30.4	10.0-120	
(S) 2,4,6-Tribromophenol			88.0	10.0-155	

L1133573-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1133573-01 09/09/19 04:57 • (MS) R3448477-3 09/09/19 05:17 • (MSD) R3448477-4 09/09/19 05:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.500	ND	0.187	0.239	37.4	47.8	1	17.0-120			24.4	40
2,4-Dinitrotoluene	0.500	ND	0.424	0.429	84.8	85.8	1	39.0-125			1.17	25
Hexachlorobenzene	0.500	ND	0.408	0.416	81.6	83.2	1	35.0-122			1.94	24
Hexachloro-1,3-butadiene	0.500	ND	0.196	0.233	39.2	46.6	1	12.0-120			17.2	34
Hexachloroethane	0.500	ND	0.164	0.221	32.8	44.2	1	10.0-120			29.6	40
Nitrobenzene	0.500	ND	0.308	0.338	61.6	67.6	1	12.0-120			9.29	30
Pyridine	0.500	ND	0.243	0.223	48.6	44.6	1	10.0-120			8.58	37
2-Methylphenol	0.500	ND	0.286	0.287	57.2	57.4	1	10.0-120			0.349	30
3&4-Methyl Phenol	0.500	ND	0.300	0.293	60.0	58.6	1	10.0-120			2.36	36
Pentachlorophenol	0.500	ND	0.350	0.365	70.0	73.0	1	10.0-128			4.20	37
2,4,5-Trichlorophenol	0.500	ND	0.422	0.407	84.4	81.4	1	33.0-120			3.62	31
2,4,6-Trichlorophenol	0.500	ND	0.379	0.390	75.8	78.0	1	26.0-120			2.86	31
(S) Nitrobenzene-d5					54.4	56.1		10.0-127				
(S) 2-Fluorobiphenyl					63.6	64.3		10.0-130				
(S) p-Terphenyl-d14					81.1	79.9		10.0-128				
(S) Phenol-d5					23.4	24.1		10.0-120				
(S) 2-Fluorophenol					30.3	32.9		10.0-120				
(S) 2,4,6-Tribromophenol					84.0	87.0		10.0-155				

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
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.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* 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 National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
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}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

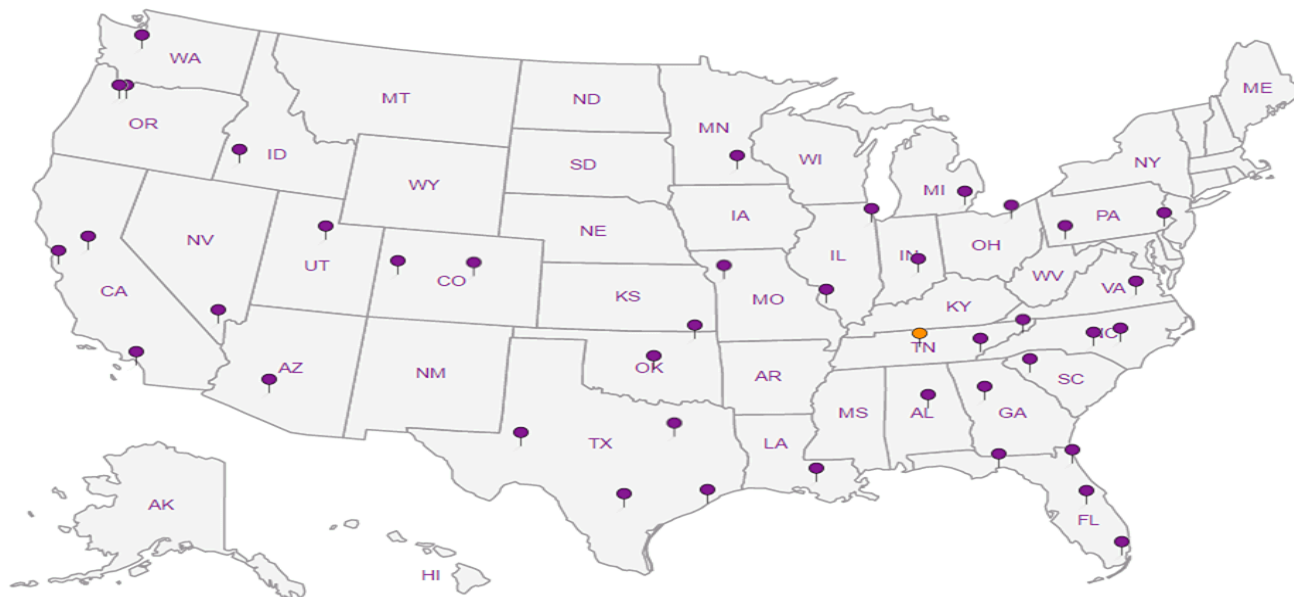
Third Party Federal Accreditations

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

