

July 30, 2019

Mr. Michael Leckie
Railroad Commission of Texas
Site Remediation Division
P.O. Box 12967
Austin, Texas 78711-2967

Telephone: 512-463-6417
E-mail: Michael.leckie@rrc.texas.gov

Re: Waste Characterization, Select Soil Sample Results, and Other Observation, May 8, 2019,
Boundary Ventures, Inc., Kenneth Owens Property Facility, Permit No. STF-010, Colorado
County, Texas

Dear Mr. Leckie:

As recently requested, Terracon Consultants, Inc. (Terracon) collected waste characterization sampling and other select shallow surface soils at the referenced site. The grab sample locations are depicted on Exhibit 1 and the laboratory analytical results can be found on Tables 1 and 2 (Appendix A). Laboratory supporting documentation can be found in Appendix B.

Terracon's evaluations of the data collected are as follows:

- **Waste Characterization** – An evaluation of the waste characterization data (Appendix A, Table 1) indicate that none of the grab samples collected on May 8, 2019 exhibit the characteristics of being hazardous according to guidance provided by:
 - *Introduction to Hazardous Waste Identification (40 CFR Parts 261), Solid Waste and Emergency Response (5305W) EPA 530-K-05-102, September 2005 or*
 - *Waste Designation Decision Matrix - Toxic Wastes, TCEQ Website*
- **Select Soil Samples** – In addition to the waste characterization sampling, RRC personnel requested that Terracon collect grab samples from three distinct locations (WC-10, WC-16, and WC-17) at the site. Specific to these three surface grab samples it should be pointed out that:
 - **WC-10.** The WC-10 sample area had previously been identified as roadbase material (SB-15, April 22, 2019 Site Investigation Report);
 - **WC-16.** The WC-16 sample area is likely a mixture of native fill, disposed WG-39, roadbase material, and perhaps, other unidentified material. A lithological description does not exist for this area; however, it is understood from discussions with the RRC and more recent site observations made by Terracon that this area



Terracon Consultants, Inc. 5307 Industrial Oaks Boulevard, Ste. 160 Austin, Texas 78735

P [512] 442-1122 F [512] 442-1181 terracon.com

contained degraded supersacks and degraded WG-39 in shallow soils and surface water.

- **WC-17.** Although a lithologic description does not exist, the material where the WC-17 grab sample was taken is presumed to also be roadbase, based on previous discussions with the RRC and an analysis of google earth imagery.
- The sample results can be found on Appendix A, Table 2. Sample results were screened against the *Texas Risk Reduction Program Table 1 Tier 1 Residential criteria for a ½ acre site (GWSoil_{Ing})*.

Analytical results presented on Table 2 indicated exceedances of screening values at WC-17 for benzene, ethylbenzene, toluene, arsenic, barium, lead, and selenium. Analytical results indicate exceedances of screening values at WC-10 and WC-16 for arsenic, barium, lead, and selenium.

□ **Other Observations –**

- **Resource Conservation and Recovery Act (RCRA) Exemption¹** – In reviewing the data presented in this letter report as well as the data presented in *Site Investigation Report, Boundary Ventures, Inc., Kenneth Owens Property Facility, Colorado County, Texas, April 22, 2019*, Terracon has not identified significant analytical evidence that would remove the RCRA exemption from most of the material sampled (oil and gas drill cuttings/waste/road base fill, finished road base, etc.). However, it is generally agreed that the following observed material would not maintain the RCRA exemption:

§ **Chemical Totes.** Chemical totes and their contents would not be eligible for the RCRA exemption unless it were demonstrated that their contents were used in the drilling of an oil and gas well.

§ **Haliburton WG-39 (Gelling Agent) Waste Found in Supersacks.** There are a large number of supersacks on location which apparently contain unused, but degraded, Haliburton WG-39. It appears that this material would not be eligible for the RCRA Exemption unless it could be demonstrated that it had been used in the drilling of an oil and gas well.

¹ See *EPA Exemption of Oil and Gas Exploration and Production Wastes from Federal Hazardous Waste Regulations*

- **RRC versus Texas Commission on the Environment (TCEQ) Jurisdiction² -** Similarly to the reasoning discussed above regarding the RCRA Exemption, Terracon has not identified significant analytical evidence that would place the jurisdiction of the material sampled (oil and gas drill cuttings/waste/road base fill, finished road base, etc.) with a state agency other than the RRC. However, it is generally agreed that the following observed material does not appear to be under the RRC's jurisdiction:
 - § **Chemical Totes.** Chemical totes and their contents unless it were demonstrated that their contents where used in the drilling of an oil and gas well.
 - § **Haliburton WG-39 (Gelling Agent) Waste Found in Supersacks.** There are a large number of supersacks on location which apparently contain unused, but degraded, Haliburton WG-39. It appears that this material would not fall under the jurisdiction of the RRC unless it could be demonstrated that the material had been used in the drilling of an oil and gas well.
- **Mixed RCRA non-Exempt and RCRA Exempt Waste.** It should be noted that large amounts of the Haliburton WG-39 (presumed to be RCRA non-Exempt) appear to be mixed with drill cuttings/waste/road base material (presumed to be RCRA Exempt) have been observed at the site, primarily in Areas of Concern No. 7 (AOC-7). Similar to other areas of the site, AOC-7 is made up of large amounts of drill cuttings/waste/road base fill. The WG-39 appears to have initially been stored in supersacks and on wooden pallets on top of the drill cuttings/waste/road base fill. Overtime the supersacks and other packaging degraded, and the material spilled onto the surface and was incorporated into the drill cuttings/waste/road base fill. The depth of mixing, or volume of mixed waste, has not been evaluated.

We appreciate the opportunity to perform these services for you. Please do not hesitate to contact either of the undersigned if you have questions regarding this project.

² See 16 TAC 3.31 Memorandum of Understanding between the Railroad Commission of Texas (RRC) and the Texas Commission on Environmental Quality (TCEQ)

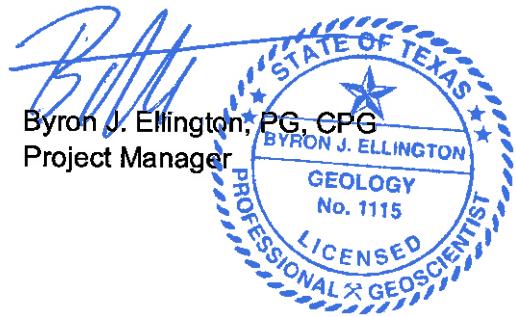
Waste Characterization, Select Soil Sample Results, and Other Observations
Boundary Ventures, Inc.,
Colorado County, Texas
July 30, 2019
Page 4



Sincerely,

TERRACON CONSULTANTS, INC.

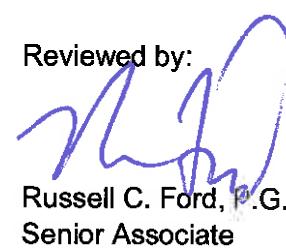
Prepared by:



Byron J. Ellington, PG, CPG

Project Manager

Reviewed by:



Russell C. Ford, P.G.
Senior Associate

Enclosure

Appendix A

Exhibits

Tables

**Boundary Ventures, Inc.
Kenneth Owens Property Facility
Colorado County, Texas
Terracon Project No. 96187C01**



Project No.	96187C01
Scale:	
Source:	Google Earth
Date:	2019

Terracon
Consulting Engineers & Scientists

5307 Industrial Oaks Blvd., Suite 160 Austin Texas 78735
Phone (512) 42-11224 Fax (512) 442-1181

Surface Soil Sample Location May 8, 2019	EXHIBIT
Boundary Ventures, Inc. Kenneth Owens Property Facility Altair, Colorado County, Texas	1

Analytical Tables
Waste Characterization and Select Soil Samples
Collection Date May 8, 2019
Boundary Ventures
Altair, Colorado County, Texas

1. *Introduction to Hazardous Waste Identification (40 CFR Parts 261), Solid Waste and Emergency Response (5305W) EPA 530-K-05-102, September 2005*

2. Common value used to evaluate if chlorinated solvents may be present in the absence of other information.

3. Although process knowledge is unknown, the concentration of reactive sulfides and cyanides are below detection limits and, hence, these samples appear to not exhibit hazardous characteristics due to reactivity.

4. U-Untreated drill cuttings/waste/road base (presumed). T-Treated drill cuttings/waste/road base (presumed). Presumption is solely based on proximity to AOC-1, the facilities apparent cuttings receiving area during recent operations. Fill impacted with chemicals of concern exist throughout the site and are not readily discernable as being untreated or treated. Terracon has not evaluated historical records, if they exists, regarding the stockpiling and locations of untreated or treated waste at the site.

SW - 1311 - SW-846 Test Method 1311: Toxicity Characteristic Leaching Procedure

mg/L - milligrams/liter

mg/Kg - milligrams/kilograms

SU - standard units

°C - Celsius Degrees

J: *The identification of the analyte is acceptable; the reported value is an estimate.*

Table 1
Waste Characterization
Boundary Ventures
Altair, Colorado County, Texas

Sample ID	Method	Method	SW1311/8260C	SW1311/8260C	SW1311/8260C	SW1311/8260C	SW1311/8260C
	U-Untreated; T-Treated Waste (Presumption Based on Location) ⁴	Analyte	1,1-Dichloro-ethene	1,2-Dichloro-ethane	1,4-Dichloro-benzene	2-Butanone	Benzene
		Date Collected	Units mg/L	Units mg/L	Units mg/L	Units mg/L	Units mg/L
WC-1	U	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-2	U	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	0.0238
WC-3	U	5/8/2019	<0.00300	0.00460 J	<0.00300	<0.0500	0.0145
WC-12	U	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-13	U	5/8/2019	<0.00300	0.00640 J	<0.00300	<0.0500	0.246
WC-15	U	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-4	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-5	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-6	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-7	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-8	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-9	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-11	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-14	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
WC-18	T	5/8/2019	<0.00300	<0.00300	<0.00300	<0.0500	<0.00300
Waste Characterization Thresholds ^{1,3}			0.7	0.5	7.5		0.5
Other Applicable Values							



Table 1
 Waste Characterization
 Boundary Ventures
 Altair, Colorado County, Texas

Sample ID	Method	Method	SW1311/8260C	SW1311/8260C	SW1311/8260C	SW1311/8260C	SW1311/8260C
	U-Untreated; T-Treated Waste (Presumption Based on Location) ⁴	Analyte	Carbon tetrachloride	Chloro-benzene	Chloroform	Tetrachloro-ethene	Trichloro-ethene
		Date Collected	Units mg/L	Units mg/L	Units mg/L	Units mg/L	Units mg/L
WC-1	U	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-2	U	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-3	U	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-12	U	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-13	U	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-15	U	5/8/2019	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300
WC-4	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-5	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-6	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-7	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-8	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-9	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-11	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-14	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
WC-18	T	5/8/2019	<0.00300	<0.00300	<0.250	<0.00300	<0.00300
Waste Characterization Thresholds ^{1,3}			0.5	100.0	6.0		
Other Applicable Values							



Table 1
Waste Characterization
Boundary Ventures
Altair, Colorado County, Texas

Sample ID	Method	Method	SW1311/8260C	SW1311/6020A	SW1311/6020A	SW1311/6020A	SW1311/6020A
	U-Untreated; T-Treated Waste (Presumption Based on Location) ⁴	Analyte	Vinyl chloride	Antimony	Arsenic	Barium	Beryllium
		Date Collected	Units mg/L	Units mg/L	Units mg/L	Units mg/L	Units mg/L
WC-1	U	5/8/2019	<0.00300	0.00427 J	0.0173 J	1.01	<0.00150
WC-2	U	5/8/2019	<0.00300	0.0107 J	0.0184 J	0.192	<0.00150
WC-3	U	5/8/2019	<0.00300	0.0173	0.0335	0.234	<0.00150
WC-12	U	5/8/2019	<0.00300	0.00460 J	<0.0100	0.461	<0.00150
WC-13	U	5/8/2019	<0.00300	0.0110 J	<0.0100	0.232	<0.00150
WC-15	U	5/8/2019	<0.00300	<0.00400	0.0288	0.551	<0.00150
WC-4	T	5/8/2019	<0.00300	<0.00400	0.0148 J	0.742	<0.00150
WC-5	T	5/8/2019	<0.00300	0.00573 J	0.0115 J	0.315	<0.00150
WC-6	T	5/8/2019	<0.00300	0.00727 J	0.0164 J	0.300	<0.00150
WC-7	T	5/8/2019	<0.00300	0.00857 J	<0.0100	0.984	<0.00150
WC-8	T	5/8/2019	<0.00300	0.00412 J	0.0167 J	0.596	<0.00150
WC-9	T	5/8/2019	<0.00300	<0.00400	0.0103 J	0.600	<0.00150
WC-11	T	5/8/2019	<0.00300	0.00729 J	<0.0100	0.244	<0.00150
WC-14	T	5/8/2019	<0.00300	0.00854 J	<0.0100	0.432	<0.00150
WC-18	T	5/8/2019	<0.00300	0.0109 J	<0.0100	0.238	<0.00150
Waste Characterization Thresholds ^{1,3}			0.2		5.0	100.0	
Other Applicable Values							



Table 1
 Waste Characterization
 Boundary Ventures
 Altair, Colorado County, Texas

Sample ID	Method	Method	SW1311/6020A	SW1311/6020A	SW1311/6020A	SW1311/6020A	SW1311/6020A
U-Untreated; T-Treated Waste (Presumption Based on Location) ⁴	Analyte	Cadmium	Chromium	Lead	Nickel	Selenium	
	Date Collected	Units mg/L	Units mg/L	Units mg/L	Units mg/L	Units mg/L	Units mg/L
WC-1	U	5/8/2019	<0.00150	<0.0100	0.00152 J	<0.0150	<0.0100
WC-2	U	5/8/2019	<0.00150	<0.0100	<0.00150	0.0976	<0.0100
WC-3	U	5/8/2019	<0.00150	0.0112 J	<0.00150	0.0575	<0.0100
WC-12	U	5/8/2019	<0.00150	<0.0100	<0.00150	0.0253 J	<0.0100
WC-13	U	5/8/2019	<0.00150	0.0220	J	<0.00150	0.0436 J
WC-15	U	5/8/2019	<0.00150	<0.0100	<0.00150	<0.0150	<0.0100
WC-4	T	5/8/2019	<0.00150	<0.0100	<0.00150	<0.0150	<0.0100
WC-5	T	5/8/2019	<0.00150	<0.0100	<0.00150	<0.0150	<0.0100
WC-6	T	5/8/2019	<0.00150	0.0235	J	<0.00150	<0.0150
WC-7	T	5/8/2019	<0.00150	<0.0100	<0.00150	0.0594	<0.0100
WC-8	T	5/8/2019	<0.00150	<0.0100	<0.00150	<0.0150	<0.0100
WC-9	T	5/8/2019	<0.00150	<0.0100	<0.00150	<0.0150	<0.0100
WC-11	T	5/8/2019	<0.00150	<0.0100	<0.00150	<0.0150	<0.0100
WC-14	T	5/8/2019	<0.00150	<0.0100	<0.00150	<0.0150	<0.0100
WC-18	T	5/8/2019	<0.00150	<0.0100	<0.00150	<0.0150	<0.0100
Waste Characterization Thresholds ^{1,3}			1.0	5.0	5.0		1.0
Other Applicable Values							



Table 1
 Waste Characterization
 Boundary Ventures
 Altair, Colorado County, Texas

Sample ID	Method	Method	SW1311/6020A	SW1311/7470A	SW1311/8270D	SW1311/8270D	SW1311/8270D
	U-Untreated; T-Treated Waste (Presumption Based on Location) ⁴	Analyte	Silver	Mercury	1,4-Dichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol
		Date Collected	Units mg/L	Units mg/L	Units mg/L	Units mg/L	Units mg/L
WC-1	U	5/8/2019	<0.00500	<0.000400	<0.00952	<0.00952	<0.00952
WC-2	U	5/8/2019	<0.00500	<0.000400	<0.00967	<0.00967	<0.00967
WC-3	U	5/8/2019	<0.00500	<0.000400	<0.00982	<0.00982	<0.00982
WC-12	U	5/8/2019	<0.00500	<0.000400	<0.00963	<0.00963	<0.00963
WC-13	U	5/8/2019	<0.00500	<0.000400	<0.00899	<0.00899	<0.00899
WC-15	U	5/8/2019	<0.00500	<0.000400	<0.00923	<0.00923	<0.00923
WC-4	T	5/8/2019	<0.00500	<0.000400	<0.00926	<0.00926	<0.00926
WC-5	T	5/8/2019	<0.00500	<0.000400	<0.00936	<0.00936	<0.00936
WC-6	T	5/8/2019	<0.00500	<0.000400	<0.00977	<0.00977	<0.00977
WC-7	T	5/8/2019	<0.00500	<0.000400	<0.00907	<0.00907	<0.00907
WC-8	T	5/8/2019	<0.00500	<0.000400	<0.00942	<0.00942	<0.00942
WC-9	T	5/8/2019	<0.00500	<0.000400	<0.00891	<0.00891	<0.00891
WC-11	T	5/8/2019	<0.00500	<0.000400	<0.00990	<0.00990	<0.00990
WC-14	T	5/8/2019	<0.00500	<0.000400	<0.00954	<0.00954	<0.00954
WC-18	T	5/8/2019	<0.00500	<0.000400	<0.00938	<0.00938	<0.00938
Waste Characterization Thresholds ^{1,3}			5.0	0.2		400.0	2.0
Other Applicable Values							

Table 1
Waste Characterization
Boundary Ventures
Altair, Colorado County, Texas

Sample ID	Method	Method	SW1311/8270D	SW1311/8270D	SW1311/8270D	SW1311/8270D	SW1311/8270D
	U-Untreated; T-Treated Waste (Presumption Based on Location) ⁴	Analyte	2,4-Dinitrotoluene	2-Methylphenol	3&4-Methylphenol	Hexachlorobenzene	Hexachlorobutadiene
		Date Collected	Units mg/L	Units mg/L	Units mg/L	Units mg/L	Units mg/L
WC-1	U	5/8/2019	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952
WC-2	U	5/8/2019	<0.00967	<0.00967	0.0161 J	<0.00967	<0.00967
WC-3	U	5/8/2019	<0.00982	<0.00982	0.0159 J	<0.00982	<0.00982
WC-12	U	5/8/2019	<0.00963	<0.00963	<0.00963	<0.00963	<0.00963
WC-13	U	5/8/2019	<0.00899	<0.00899	0.0183 J	<0.00899	<0.00899
WC-15	U	5/8/2019	<0.00923	<0.00923	<0.00923	<0.00923	<0.00923
WC-4	T	5/8/2019	<0.00926	<0.00926	<0.00926	<0.00926	<0.00926
WC-5	T	5/8/2019	<0.00936	<0.00936	<0.00936	<0.00936	<0.00936
WC-6	T	5/8/2019	<0.00977	<0.00977	<0.00977	<0.00977	<0.00977
WC-7	T	5/8/2019	<0.00907	<0.00907	<0.00907	<0.00907	<0.00907
WC-8	T	5/8/2019	<0.00942	<0.00942	<0.00942	<0.00942	<0.00942
WC-9	T	5/8/2019	<0.00891	<0.00891	<0.00891	<0.00891	<0.00891
WC-11	T	5/8/2019	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990
WC-14	T	5/8/2019	<0.00954	<0.00954	<0.00954	<0.00954	<0.00954
WC-18	T	5/8/2019	<0.00938	<0.00938	<0.00938	<0.00938	<0.00938
Waste Characterization Thresholds ^{1,3}			0.1			0.13	0.5
Other Applicable Values							

Table 1
Waste Characterization
Boundary Ventures
Altair, Colorado County, Texas

Sample ID	Method	Method	SW1311/8270D	SW1311/8270D	SW1311/8270D	SW1311/8270D	SW1010
	U-Untreated; T-Treated Waste (Presumption Based on Location) ⁴	Analyte	Hexachloro-ethane	Nitro-benzene	Pentachloro-phenol	Pyridine	Ignitability
		Date Collected	Units mg/L	Units mg/L	Units mg/L	Units mg/L	Units °C
WC-1	U	5/8/2019	<0.00952	<0.0190	<0.0190	<0.0381	>100
WC-2	U	5/8/2019	<0.00967	<0.0193	<0.0193	<0.0387	>100
WC-3	U	5/8/2019	<0.00982	<0.0196	<0.0196	<0.0393	>100
WC-12	U	5/8/2019	<0.00963	<0.0193	<0.0193	<0.0385	>100
WC-13	U	5/8/2019	<0.00899	<0.0180	<0.0180	<0.0360	>100
WC-15	U	5/8/2019	<0.00923	<0.0185	<0.0185	<0.0369	>100
WC-4	T	5/8/2019	<0.00926	<0.0185	<0.0185	<0.0370	>100
WC-5	T	5/8/2019	<0.00936	<0.0187	<0.0187	<0.0375	>100
WC-6	T	5/8/2019	<0.00977	<0.0195	<0.0195	<0.0391	>100
WC-7	T	5/8/2019	<0.00907	<0.0181	<0.0181	<0.0363	>100
WC-8	T	5/8/2019	<0.00942	<0.0188	<0.0188	<0.0377	>100
WC-9	T	5/8/2019	<0.00891	<0.0178	<0.0178	<0.0357	>100
WC-11	T	5/8/2019	<0.00990	<0.0198	<0.0198	<0.0396	>100
WC-14	T	5/8/2019	<0.00954	<0.0191	<0.0191	<0.0382	>100
WC-18	T	5/8/2019	<0.00938	<0.0188	<0.0188	<0.0375	>100
Waste Characterization Thresholds ^{1,3}			3.0	2.0	100.0	5.0	60.0
Other Applicable Values							



Table 1
 Waste Characterization
 Boundary Ventures
 Altair, Colorado County, Texas

Sample ID	Method	Method	Sw846 Ch7.3	Sw846 Ch7.3	SW9045D	SW9023M
	U-Untreated; T-Treated Waste (Presumption Based on Location) ⁴	Analyte	Reactive Cyanide ³	Reactive Sulfide ³	pH	Halides, Total organic as Cl (TOX)
		Date Collected	Units mg/Kg	Units mg/Kg	pH Units @ 21.6°C	Units mg/Kg-dry
WC-1	U	5/8/2019	<0.0494	<19.8	7.49	<0.575
WC-2	U	5/8/2019	<0.0493	<19.7	7.47	12.5
WC-3	U	5/8/2019	<0.0471	<18.9	10.71	1.73
WC-12	U	5/8/2019	<0.0490	<19.6	7.31	<0.680
WC-13	U	5/8/2019	<0.0495	<19.8	11.54	4.05
WC-15	U	5/8/2019	<0.0499	<20.0	7.57	<0.670
WC-4	T	5/8/2019	<0.0495	<19.8	7.56	<0.692
WC-5	T	5/8/2019	<0.0482	<19.3	7.32	<0.674
WC-6	T	5/8/2019	<0.0491	<19.6	7.43	<0.645
WC-7	T	5/8/2019	<0.0489	<19.6	8.81	<0.614
WC-8	T	5/8/2019	<0.0491	<19.6	7.76	<0.652
WC-9	T	5/8/2019	<0.0494	<19.7	7.89	<0.687
WC-11	T	5/8/2019	<0.0485	<19.4	7.59	<0.660
WC-14	T	5/8/2019	<0.0493	<19.7	8.17	<0.649
WC-18	T	5/8/2019	<0.0482	<19.3	8.58	<0.605
Waste Characterization Thresholds ^{1,3}			See Note 3	See Note 3	<2 or >12.5	
Other Applicable Values						100 ²



Table 2
Select Soil Samples
Boundary Ventures
Altair, Colorado County, Texas



Table 2
Select Soil Samples
Boundary Ventures
Altair, Colorado County, Texas



Table 2
Select Soil Samples
Boundary Ventures
Altair, Colorado County, Texas



Sample ID	Method	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D
	Analyte	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dichlorophenol	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methyl-naphthalene	2-Methylphenol	2-Nitroaniline	2-Nitrophenol
	Date	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
WC-10	5/8/2019	<0.0127	<0.0127	<6.34	<1.27	<0.0127	<1.27	<0.0127	<0.0127	<0.0127	<0.0127	<1.27	<0.0127
WC-16	5/8/2019	<0.0142	<0.0142	<7.12	<1.42	<0.0142	<1.42	<0.0142	<0.0142	<0.0142	<0.0142	<1.42	<0.0142
WC-17	5/8/2019	<1.30	<1.30	<0.651	<0.130	<1.30	<0.130	<0.130	<0.130	22.1	<0.130	<0.130	<1.30
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		0.35	3.2	0.094	0.0053	0.069	0.0048	670	1.6	17	7.1	0.022	0.13

Sample ID	Method	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D
	Analyte	3,3'-Dichlorobenzidine	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl-phenyl ether	4-Methylphenol	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene
	Date	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
WC-10	5/8/2019	<0.0127	<1.27	<3.80	<1.27	<0.0127	<0.0380	<1.27	<0.0254	<1.27	<6.34	<1.27	<0.0127
WC-16	5/8/2019	<0.0142	<1.42	<4.27	<1.42	<0.0142	<0.0427	<1.42	<0.0285	<1.42	<7.12	<1.42	<0.0142
WC-17	5/8/2019	<0.130	<0.130	<0.390	<0.130	<1.30	<0.390	<0.130	<0.260	<0.130	<0.651	<0.130	<0.130
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		0.063	0.026	0.0047	0.35	4.5	0.021	0.032	0.63	0.11	0.1	240	410

Sample ID	Method	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D
	Analyte	Aniline	Anthracene	Benzo[a]-anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]-perylene	Benzo[k]fluoranthene	Benzyl alcohol	DIS(Z-chloroethoxy)-methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	Bis(2-ethylhexyl)phthalate
	Date	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
WC-10	5/8/2019	<0.0837	<1.27	<0.0127	0.0955	<0.0127	0.0905	0.156	<0.0380	<0.0127	<0.0127	<0.0127	0.245
WC-16	5/8/2019	<0.0939	<1.42	0.330	0.237	<0.0142	0.227	0.601	<0.0427	<0.0142	<0.0142	<0.0142	16.5
WC-17	5/8/2019	<0.859	<0.130	3.82	4.86	<1.30	<1.30	4.16	<0.390	<1.30	<0.130	<0.130	<0.390
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		0.37	6900	130	7.6	440	46000	4500	5.9	0.012	0.0021	0.19	160

Table 2
Select Soil Samples
Boundary Ventures
Altair, Colorado County, Texas



Sample ID	Method	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D			
	Analyte	Butyl benzyl-phthalate	Carbazole	Chrysene	Dibenz[a,h]anthracene	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene			
	Date	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier			
		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg				
WC-10	5/8/2019	<0.0507		<1.27		0.660	J	<1.27	<5.07	<5.07	<0.0507	<0.0507	<1.27	<1.27	<0.0127	
WC-16	5/8/2019	<0.0569		<1.42		0.568		<1.42	<5.69	<5.69	<5.69	<0.0569	1.42	<1.42	<0.0142	
WC-17	5/8/2019	<0.520		<0.130		<0.130		<1.30	<0.130	<0.520	<0.520	<5.20	9.98	<0.130	<0.130	
TX Table 1 Tier 1																
Residential GW Soil Ing 0_5 Acre 4/2018		260		4.6		11000		15	33	160	62	3300	810000	1900	300	1.1

Sample ID	Method	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D	SW8270D			
	Analyte	Hexachlorobutadiene	Hexachloro-cyclopentadiene	Hexachloroethane	Indeno[1,2,3-cd]pyrene	Isophorone	Naphthalene	Nitrobenzene	N-Nitrosodiethylamine	N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene			
	Date	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier			
		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		
WC-10	5/8/2019	<0.0127		<3.80		<0.0127		0.0406	<0.0380	<0.0127	<0.0127	<0.0127	<0.0127	<1.27	<1.27	<1.27
WC-16	5/8/2019	<0.0142		<4.27		<0.0142		0.118	<0.0427	<0.0142	<0.0142	<0.0142	<0.0142	<1.42	<1.42	2.09
WC-17	5/8/2019	<0.130		<0.390		<0.130	J	1.91	<0.390	12.4	<0.130	<0.130	<0.130	<0.130	<0.130	11.2
TX Table 1 Tier 1																
Residential GW Soil Ing 0_5 Acre 4/2018		3.3		19		1.3		1300	3	31	0.35	0.000012	0.00035	2.8	0.018	420

Sample ID	Method	SW8270D	SW8270D	SW8270D	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A		
	Analyte	Phenol	Pyrene	Pyridine	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt		
	Date	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier		
		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
WC-10	5/8/2019	<0.0127	0.267	<0.0634	13000	1.60	18.7	5030	0.466	0.522	70400	30.2	5.18		
WC-16	5/8/2019	<0.0142	1.50	<0.0712	16500	1.70	16.0	6060	0.676	0.411	74200	29.8	5.43		
WC-17	5/8/2019	<0.130	14.1	<0.651	16100	3.69	11.1	6330	0.604	0.321	77800	36.7	5.49		
TX Table 1 Tier 1															
Residential GW Soil Ing 0_5 Acre 4/2018		19		1100		0.069		170000	5.4	5	440	1.8	1.5		
														2400	220

Table 2
 Select Soil Samples
 Boundary Ventures
 Altair, Colorado County, Texas



Sample ID	Method	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A	SW6020A
	Analyte	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	
	Date	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit	Qualifier	Unit
		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg
WC-10	5/8/2019	47.2		15700	55.8	12.1	3190	235	6.90	18.7	2560	3.51	0.176	J
WC-16	5/8/2019	48.3		17500	51.9	14.4	4350	272	6.94	19.1	3450	3.97	0.199	J
WC-17	5/8/2019	47.3		21400	39.0	11.7	3930	318	11.8	31.1	2470	7.43	0.149	J
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		1000		3				1200	49	160		2.3		

Sample ID	Method	SW6020A	SW6020A	SW6020A	SW7471B
	Analyte	Thallium	Vanadium	Zinc	Mercury
	Date	Unit	Qualifier	Unit	Unit
		mg/Kg		mg/Kg	mg/Kg
WC-10	5/8/2019	<0.590	56.5	117	0.487
WC-16	5/8/2019	<0.701	49.9	127	0.547
WC-17	5/8/2019	<0.649	61.7	142	0.483
TX Table 1 Tier 1 Residential GW Soil Ing 0_5 Acre 4/2018		1.7	880	2400	2.1

Appendix B

Laboratory Reports

**Boundary Ventures, Inc.
Kenneth Owens Property Facility
Colorado County, Texas
Terracon Project No. 96187C01**



May 13, 2019

Byron Ellington
Terracon
5307 Industrial Oaks Blvd., Suite 160
Austin, Texas 78735
TEL: (512) 442-1122
FAX (512) 442-1181
RE: Boundary Ventures

Order No.: 1905097

Dear Byron Ellington:

DHL Analytical, Inc. received 1 sample(s) on 5/8/2019 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative and all estimated uncertainties of results are within method specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in red ink that reads "John DuPont".

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-19-24



Table of Contents

Miscellaneous Documents	3
CaseNarrative 1905097	5
Analytical Report 1905097	6
AnalyticalQCSummaryReport 1905097	8
Subcontract Report 1905097	23



2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229

Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com



Nº 79657

CHAIN-OF-CUSTODY

CLIENT: Ferracom
ADDRESS: 5507 Industrial Oaks
PHONE: (512) 442-1122 FAX/E-MAIL:
DATA REPORTED TO: Bryan Ellington
ADDITIONAL REPORT COPIES TO:

DATE: 5/8/19

PO #:

DHL WORK ORDER #: 1995097

PROJECT LOCATION OR NAME:

CLENT PROJECT #: 96187(20)

COLLECTOR

Authorize 5% surcharge for TRRP Report? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	S=SOIL P=PAINT W=WATER SL=SLUDGE A=AIR O=OTHER L=LIQUID SO=SOLID SE=SEDIMENT
--	--

PRESERVATION	
Container Type	# of Containers
HCl	
HNO ₃	<input checked="" type="checkbox"/>
H ₂ SO ₄	<input type="checkbox"/>
NaOH	<input checked="" type="checkbox"/>
ICE	
UNPRESERVED	

ANALYSES
TEXO MTE
PH 1

WC-15 01 5/8/19 1230 S

~~RELINQUISHED BY: (Signature)~~

RELINQUISHED BY A (Signature)

RELINQUISHED BY: (Signature)

DATE/TIME
8/8/19 11:30
DATE/TIME

RECEIVED BY: (Signature)

RECEIVED BY: (Signature)

RECEIVED BY: (Signature)

TURN AROUND TIME

RUSH CALL FIRST
1 DAY CALL FIRST
2 DAY
NORMAL
OTHER

LABORATORY USE ONLY

RECEIVING TEMP: 52°C THERM #: 78
CUSTODY SEALS: BROKEN INTACT NOT USED
CARRIER: LONE STAR FEDEX UPS OTHER
 COURIER DELIVERY
 HAND DELIVERED

DHL DISPOSAL @ \$5.00 each

Return

Sample Receipt Checklist

Client Name Terracon

Date Received: 5/8/2019

Work Order Number 1905097

Received by EL

Checklist completed by:

Signature

5/8/2019

Date

Reviewed by:

Initials

5/8/2019

Date

Carrier name Hand DeliveredShipping container/cooler in good condition? Yes No Not Present Custody seals intact on shipping container/cooler? Yes No Not Present Custody seals intact on sample bottles? Yes No Not Present Chain of custody present? Yes No Chain of custody signed when relinquished and received? Yes No Chain of custody agrees with sample labels? Yes No Samples in proper container/bottle? Yes No Sample containers intact? Yes No Sufficient sample volume for indicated test? Yes No All samples received within holding time? Yes No Container/Temp Blank temperature in compliance? Yes No 5.2 °CWater - VOA vials have zero headspace? Yes No No VOA vials submitted Water - pH<2 acceptable upon receipt? Yes No NA LOT #

Adjusted? _____ Checked by _____

Water - pH>9 (S) or pH>10 (CN) acceptable upon receipt? Yes No NA LOT #

Adjusted? _____ Checked by _____

Any No response must be detailed in the comments section below.

Client contacted _____

Date contacted: _____

Person contacted _____

Contacted by: _____

Regarding: _____

Comments: _____

_____Corrective Action _____

CLIENT: Terracon
Project: Boundary Ventures
Lab Order: 1905097

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

All method blanks, sample duplicates, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For TCLP Volatiles analysis by method SW1311/8260C the matrix spike and matrix spike duplicate had the RPD above control limits for 2-Butanone. This is flagged accordingly in the enclosed QC summary report. The "R" flag denotes the RPD was outside control limits. The percent recovery was within control limits for this compound. No further corrective actions were taken.

The results of the sample were below TCLP or RCRA characterization limits.

The TOX analysis was sub-contracted to Analysys Laboratories.

DHL Analytical, Inc.

Date: 13-May-19

CLIENT:	Terracon	Client Sample ID: WC-15						
Project:	Boundary Ventures	Lab ID: 1905097-01						
Project No:	96187101	Collection Date: 05/08/19 12:30 PM						
Lab Order:	1905097	Matrix: SOIL						
Analyses		Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY		SW1311/7470A						Analyst: BM
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/13/19 09:24 AM	
TCLP METALS		SW1311/6020A						Analyst: RO
Antimony	<0.00400	0.00400	0.0125		mg/L	1	05/13/19 11:46 AM	
Arsenic	0.0288	0.0100	0.0250		mg/L	1	05/13/19 11:46 AM	
Barium	0.551	0.0150	0.0500		mg/L	1	05/13/19 11:46 AM	
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/13/19 11:46 AM	
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/13/19 11:46 AM	
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/13/19 11:46 AM	
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/13/19 11:46 AM	
Nickel	<0.0150	0.0150	0.0500		mg/L	1	05/13/19 11:46 AM	
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/13/19 11:46 AM	
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/13/19 11:46 AM	
TCLP SEMI-VOLATILES		SW1311/8270D						Analyst: LG
1,4-Dichlorobenzene	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
2,4,5-Trichlorophenol	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
2,4,6-Trichlorophenol	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
2,4-Dinitrotoluene	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
2-Methylphenol	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
3&4-Methylphenol	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
Hexachlorobenzene	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
Hexachlorobutadiene	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
Hexachloroethane	<0.00923	0.00923	0.0369		mg/L	1	05/13/19 02:16 PM	
Nitrobenzene	<0.0185	0.0185	0.0369		mg/L	1	05/13/19 02:16 PM	
Pentachlorophenol	<0.0185	0.0185	0.0369		mg/L	1	05/13/19 02:16 PM	
Pyridine	<0.0369	0.0369	0.0923		mg/L	1	05/13/19 02:16 PM	
Surr: 2,4,6-Tribromophenol	90.5	0	42-124		%REC	1	05/13/19 02:16 PM	
Surr: 2-Fluorobiphenyl	79.2	0	48-120		%REC	1	05/13/19 02:16 PM	
Surr: 2-Fluorophenol	64.2	0	20-120		%REC	1	05/13/19 02:16 PM	
Surr: 4-Terphenyl-d14	86.8	0	51-135		%REC	1	05/13/19 02:16 PM	
Surr: Nitrobenzene-d5	89.0	0	41-120		%REC	1	05/13/19 02:16 PM	
Surr: Phenol-d5	67.8	0	20-120		%REC	1	05/13/19 02:16 PM	
TCLP VOLATILES		SW1311/8260C						Analyst: DEW
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM	
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM	
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM	
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/10/19 04:37 PM	
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM	

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 13-May-19

CLIENT: Terracon **Client Sample ID:** WC-15
Project: Boundary Ventures **Lab ID:** 1905097-01
Project No: 96187101 **Collection Date:** 05/08/19 12:30 PM
Lab Order: 1905097 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM
Chloroform	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/10/19 04:37 PM
Surr: 1,2-Dichloroethane-d4	98.1	0	72-119	%REC		10	05/10/19 04:37 PM
Surr: 4-Bromofluorobenzene	100	0	76-119	%REC		10	05/10/19 04:37 PM
Surr: Dibromofluoromethane	98.1	0	85-115	%REC		10	05/10/19 04:37 PM
Surr: Toluene-d8	99.1	0	81-120	%REC		10	05/10/19 04:37 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.670	0.670	0.670	N	mg/Kg-dry	1	05/09/19 06:41 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/10/19 04:30 PM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.57	0	0		pH Units@21.2°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	25.4	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0499	0.0499	0.0998	N	mg/Kg	1	05/09/19 05:13 PM
Reactive Sulfide	<20.0	20.0	20.0	N	mg/Kg	1	05/09/19 03:56 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT**RunID:** CETAC2_HG_190513A

The QC data in batch 90847 applies to the following samples: 1905097-01B

Sample ID	MB-90847	Batch ID:	90847	TestNo:	SW1311/7470A		Units:	mg/L			
SampType:	MBLK	Run ID:	CETAC2_HG_190513A	Analysis Date:	5/13/2019 9:13:20 AM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		<0.0000800	0.000200								
Sample ID	MB-90828-TCLP	Batch ID:	90847	TestNo:	SW1311/7470A		Units:	mg/L			
SampType:	MBLK	Run ID:	CETAC2_HG_190513A	Analysis Date:	5/13/2019 9:15:35 AM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		<0.000400	0.00100	0							
Sample ID	LCS-90847	Batch ID:	90847	TestNo:	SW1311/7470A		Units:	mg/L			
SampType:	LCS	Run ID:	CETAC2_HG_190513A	Analysis Date:	5/13/2019 9:20:08 AM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.00195	0.000200	0.002000	0	97.5	85	115			
Sample ID	LCSD-90847	Batch ID:	90847	TestNo:	SW1311/7470A		Units:	mg/L			
SampType:	LCSD	Run ID:	CETAC2_HG_190513A	Analysis Date:	5/13/2019 9:22:25 AM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.00196	0.000200	0.002000	0	98.0	85	115	0.512	15	
Sample ID	1905105-01A MS	Batch ID:	90847	TestNo:	SW1311/7470A		Units:	mg/L			
SampType:	MS	Run ID:	CETAC2_HG_190513A	Analysis Date:	5/13/2019 9:29:11 AM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0102	0.00100	0.01000	0	103	80	120			
Sample ID	1905105-01A MSD	Batch ID:	90847	TestNo:	SW1311/7470A		Units:	mg/L			
SampType:	MSD	Run ID:	CETAC2_HG_190513A	Analysis Date:	5/13/2019 9:31:27 AM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0102	0.00100	0.01000	0	103	80	120	0	15	
Sample ID	1905105-01A SD	Batch ID:	90847	TestNo:	SW1311/7470A		Units:	mg/L			
SampType:	SD	Run ID:	CETAC2_HG_190513A	Analysis Date:	5/13/2019 9:33:43 AM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		<0.00200	0.00500	0	0				0	10	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 1 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190513A

Sample ID	1905105-01A PDS	Batch ID:	90847	TestNo:	SW1311/7470A	Units:	mg/L
SampType:	PDS	Run ID:	CETAC2_HG_190513A	Analysis Date:	5/13/2019 9:35:59 AM	Prep Date:	5/10/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Mercury		0.0118	0.00100	0.01250	0	94.4	85 115

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 2 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_190513A

The QC data in batch 90836 applies to the following samples: 1905097-01B

Sample ID	MB-90836	Batch ID:	90836	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	MLBK	Run ID:	ICP-MS5_190513A <th data-cs="2" data-kind="parent">Analysis Date: 5/13/2019 11:28:00 AM</th> <th data-kind="ghost"></th> <th>Prep Date:</th> <td>5/10/2019</td>	Analysis Date: 5/13/2019 11:28:00 AM		Prep Date:	5/10/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		<0.000800	0.00250				
Arsenic		<0.00200	0.00500				
Barium		<0.00300	0.0100				
Beryllium		<0.000300	0.00100				
Cadmium		<0.000300	0.00100				
Chromium		<0.00200	0.00500				
Lead		<0.000300	0.00100				
Nickel		<0.00300	0.0100				
Selenium		<0.00200	0.00500				
Silver		<0.00100	0.00200				

Sample ID	MB-90828-TCLP	Batch ID:	90836	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	MLBK	Run ID:	ICP-MS5_190513A	Analysis Date: 5/13/2019 11:33:00 AM		Prep Date:	5/10/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		<0.00400	0.0125				
Arsenic		<0.0100	0.0250				
Barium		<0.0150	0.0500				
Beryllium		<0.00150	0.00500				
Cadmium		<0.00150	0.00500				
Chromium		<0.0100	0.0250				
Lead		<0.00150	0.00500				
Nickel		<0.0150	0.0500				
Selenium		<0.0100	0.0250				
Silver		<0.00500	0.0100				

Sample ID	LCS-90836	Batch ID:	90836	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	LCS	Run ID:	ICP-MS5_190513A	Analysis Date: 5/13/2019 11:35:00 AM		Prep Date:	5/10/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		0.196	0.00250	0.2000	0	98.2	80 120
Arsenic		0.211	0.00500	0.2000	0	106	80 120
Barium		0.201	0.0100	0.2000	0	101	80 120
Beryllium		0.198	0.00100	0.2000	0	98.8	80 120
Cadmium		0.199	0.00100	0.2000	0	99.3	80 120
Chromium		0.198	0.00500	0.2000	0	98.8	80 120
Lead		0.197	0.00100	0.2000	0	98.4	80 120
Nickel		0.221	0.0100	0.2000	0	110	80 120
Selenium		0.207	0.00500	0.2000	0	103	80 120
Silver		0.203	0.00200	0.2000	0	101	80 120

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 3 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_190513A

Sample ID	LCSD-90836	Batch ID:	90836	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	LCSD	Run ID:	ICP-MS5_190513A	Analysis Date: 5/13/2019 11:37:00 AM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		0.195	0.00250	0.2000	0	97.7	80	120	0.517	15	
Arsenic		0.212	0.00500	0.2000	0	106	80	120	0.215	15	
Barium		0.200	0.0100	0.2000	0	100	80	120	0.642	15	
Beryllium		0.196	0.00100	0.2000	0	98.2	80	120	0.649	15	
Cadmium		0.199	0.00100	0.2000	0	99.4	80	120	0.088	15	
Chromium		0.198	0.00500	0.2000	0	98.9	80	120	0.041	15	
Lead		0.196	0.00100	0.2000	0	98.2	80	120	0.138	15	
Nickel		0.222	0.0100	0.2000	0	111	80	120	0.537	15	
Selenium		0.205	0.00500	0.2000	0	103	80	120	0.682	15	
Silver		0.202	0.00200	0.2000	0	101	80	120	0.316	15	
Sample ID	1905047-01A SD	Batch ID:	90836	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	SD	Run ID:	ICP-MS5_190513A	Analysis Date: 5/13/2019 11:44:00 AM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		<0.0200	0.0625	0	0				0	10	
Arsenic		<0.0500	0.125	0	0				0	10	
Barium		0.350	0.250	0	0.3386				3.23	10	
Beryllium		<0.00750	0.0250	0	0				0	10	
Cadmium		<0.00750	0.0250	0	0				0	10	
Chromium		<0.0500	0.125	0	0				0	10	
Lead		<0.00750	0.0250	0	0				0	10	
Nickel		<0.0750	0.250	0	0				0	10	
Selenium		<0.0500	0.125	0	0				0	10	
Silver		<0.0250	0.0500	0	0				0	10	
Sample ID	1905047-01A PDS	Batch ID:	90836	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	PDS	Run ID:	ICP-MS5_190513A	Analysis Date: 5/13/2019 12:07:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		0.934	0.0125	1.000	0	93.4	80	120			
Arsenic		0.982	0.0250	1.000	0	98.2	80	120			
Barium		1.29	0.0500	1.000	0.3386	95.6	80	120			
Beryllium		1.00	0.00500	1.000	0	100	80	120			
Cadmium		0.947	0.00500	1.000	0	94.7	80	120			
Chromium		0.955	0.0250	1.000	0	95.5	80	120			
Lead		0.964	0.00500	1.000	0	96.4	80	120			
Nickel		1.03	0.0500	1.000	0	103	80	120			
Selenium		1.01	0.0250	1.000	0	101	80	120			
Silver		0.933	0.0100	1.000	0	93.3	80	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 4 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_190513A

Sample ID	1905047-01A MS	Batch ID:	90836	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	MS	Run ID:	ICP-MS5_190513A	Analysis Date:	5/13/2019 12:09:00 PM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		1.01	0.0125	1.000	0	101	80	120			
Arsenic		1.04	0.0250	1.000	0	104	80	120			
Barium		1.40	0.0500	1.000	0.3386	106	80	120			
Beryllium		1.01	0.00500	1.000	0	101	80	120			
Cadmium		1.00	0.00500	1.000	0	100	80	120			
Chromium		1.00	0.0250	1.000	0	100	80	120			
Lead		1.02	0.00500	1.000	0	102	80	120			
Nickel		1.07	0.0500	1.000	0	107	80	120			
Selenium		1.03	0.0250	1.000	0	103	80	120			
Silver		0.995	0.0100	1.000	0	99.5	80	120			

Sample ID	1905047-01A MSD	Batch ID:	90836	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	MSD	Run ID:	ICP-MS5_190513A	Analysis Date:	5/13/2019 12:11:00 PM		Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		1.03	0.0125	1.000	0	103	80	120	1.51	15	
Arsenic		1.05	0.0250	1.000	0	105	80	120	1.17	15	
Barium		1.41	0.0500	1.000	0.3386	107	80	120	0.503	15	
Beryllium		1.02	0.00500	1.000	0	102	80	120	0.648	15	
Cadmium		1.02	0.00500	1.000	0	102	80	120	1.57	15	
Chromium		1.02	0.0250	1.000	0	102	80	120	1.95	15	
Lead		1.04	0.00500	1.000	0	104	80	120	1.85	15	
Nickel		1.08	0.0500	1.000	0	108	80	120	1.39	15	
Selenium		1.02	0.0250	1.000	0	102	80	120	0.907	15	
Silver		1.01	0.0100	1.000	0	101	80	120	1.04	15	

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 5 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190513A

The QC data in batch 90858 applies to the following samples: 1905097-01B

Sample ID	LCS-90858	Batch ID:	90858	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	LCS	Run ID:	GCMS9_190513A	Analysis Date: 5/13/2019 1:09:00 PM			Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		0.0264	0.00400	0.04000	0	66.0	30	125			
2,4,5-Trichlorophenol		0.0301	0.00400	0.04000	0	75.2	49	120			
2,4,6-Trichlorophenol		0.0293	0.00400	0.04000	0	73.2	49	126			
2,4-Dinitrotoluene		0.0307	0.00400	0.04000	0	76.8	51	120			
2-Methylphenol		0.0276	0.00400	0.04000	0	69.0	38	120			
3&4-Methylphenol		0.0270	0.00400	0.04000	0	67.4	32	120			
Hexachlorobenzene		0.0330	0.00400	0.04000	0	82.4	52	120			
Hexachlorobutadiene		0.0278	0.00400	0.04000	0	69.5	27	120			
Hexachloroethane		0.0286	0.00400	0.04000	0	71.6	28	120			
Nitrobenzene		0.0315	0.00400	0.04000	0	78.8	44	120			
Pentachlorophenol		0.0244	0.00400	0.04000	0	61.0	38	120			
Pyridine		0.0195	0.0100	0.04000	0	48.8	20	120			
Surr: 2,4,6-Tribromophenol		0.0670		0.08000		83.8	42	124			
Surr: 2-Fluorobiphenyl		0.0552		0.08000		69.0	48	120			
Surr: 2-Fluorophenol		0.0474		0.08000		59.2	20	120			
Surr: 4-Terphenyl-d14		0.0594		0.08000		74.2	51	135			
Surr: Nitrobenzene-d5		0.0630		0.08000		78.8	41	120			
Surr: Phenol-d5		0.0516		0.08000		64.5	20	120			

Sample ID	MB-90794-TCLP	Batch ID:	90858	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS9_190513A	Analysis Date: 5/13/2019 1:31:00 PM			Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		<0.00923	0.0369	0							
2,4,5-Trichlorophenol		<0.00923	0.0369	0							
2,4,6-Trichlorophenol		<0.00923	0.0369	0							
2,4-Dinitrotoluene		<0.00923	0.0369	0							
2-Methylphenol		<0.00923	0.0369	0							
3&4-Methylphenol		<0.00923	0.0369	0							
Hexachlorobenzene		<0.00923	0.0369	0							
Hexachlorobutadiene		<0.00923	0.0369	0							
Hexachloroethane		<0.00923	0.0369	0							
Nitrobenzene		<0.0185	0.0369	0							
Pentachlorophenol		<0.0185	0.0369	0							
Pyridine		<0.0369	0.0923	0							
Surr: 2,4,6-Tribromophenol		0.657		0.7380		89.0	42	124			
Surr: 2-Fluorobiphenyl		0.565		0.7380		76.5	48	120			
Surr: 2-Fluorophenol		0.452		0.7380		61.3	20	120			
Surr: 4-Terphenyl-d14		0.655		0.7380		88.8	51	135			
Surr: Nitrobenzene-d5		0.629		0.7380		85.2	41	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 6 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190513A

Sample ID	MB-90794-TCLP	Batch ID:	90858	TestNo:	SW1311/8270D	Units:	mg/L				
SampType:	MBLK	Run ID:	GCMS9_190513A	Analysis Date: 5/13/2019 1:31:00 PM		Prep Date:	5/13/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Phenol-d5		0.482		0.7380		65.2	20	120			
Sample ID	MB-90858	Batch ID:	90858	TestNo:	SW1311/8270D	Units:	mg/L				
SampType:	MBLK	Run ID:	GCMS9_190513A	Analysis Date: 5/13/2019 1:54:00 PM		Prep Date:	5/13/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		<0.00100	0.00400								
2,4,5-Trichlorophenol		<0.00100	0.00400								
2,4,6-Trichlorophenol		<0.00100	0.00400								
2,4-Dinitrotoluene		<0.00100	0.00400								
2-Methylphenol		<0.00100	0.00400								
3&4-Methylphenol		<0.00100	0.00400								
Hexachlorobenzene		<0.00100	0.00400								
Hexachlorobutadiene		<0.00100	0.00400								
Hexachloroethane		<0.00100	0.00400								
Nitrobenzene		<0.00200	0.00400								
Pentachlorophenol		<0.00200	0.00400								
Pyridine		<0.00400	0.0100								
Surr: 2,4,6-Tribromophenol		0.0676		0.08000		84.5	42	124			
Surr: 2-Fluorobiphenyl		0.0612		0.08000		76.5	48	120			
Surr: 2-Fluorophenol		0.0508		0.08000		63.5	20	120			
Surr: 4-Terphenyl-d14		0.0624		0.08000		78.0	51	135			
Surr: Nitrobenzene-d5		0.0684		0.08000		85.5	41	120			
Surr: Phenol-d5		0.0544		0.08000		68.0	20	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 7 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190510B

The QC data in batch 90851 applies to the following samples: 1905097-01A

Sample ID	MB-90851	Batch ID:	90851	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MLBK	Run ID:	GCMS7_190510B	Analysis Date: 5/10/2019 10:35:00 AM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		<0.000300	0.00100								
1,2-Dichloroethane		<0.000300	0.00100								
1,4-Dichlorobenzene		<0.000300	0.00100								
2-Butanone		<0.00500	0.0150								
Benzene		<0.000300	0.00100								
Carbon tetrachloride		<0.000300	0.00100								
Chlorobenzene		<0.000300	0.00100								
Chloroform		<0.000300	0.00100								
Tetrachloroethene		<0.000300	0.00100								
Trichloroethene		<0.000300	0.00100								
Vinyl chloride		<0.000300	0.00100								
Surr: 1,2-Dichloroethane-d4		0.207		0.2000		103	72	119			
Surr: 4-Bromofluorobenzene		0.203		0.2000		101	76	119			
Surr: Dibromofluoromethane		0.197		0.2000		98.5	85	115			
Surr: Toluene-d8		0.197		0.2000		98.7	81	120			

Sample ID	LCS-90851	Batch ID:	90851	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	LCS	Run ID:	GCMS7_190510B	Analysis Date: 5/10/2019 3:15:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.0267	0.00100	0.02320	0	115	68	130			
1,2-Dichloroethane		0.0234	0.00100	0.02320	0	101	69	132			
1,4-Dichlorobenzene		0.0219	0.00100	0.02320	0	94.5	74	123			
2-Butanone		0.100	0.0150	0.1160	0	86.5	49	136			
Benzene		0.0234	0.00100	0.02320	0	101	81	122			
Carbon tetrachloride		0.0248	0.00100	0.02320	0	107	66	138			
Chlorobenzene		0.0225	0.00100	0.02320	0	97.0	81	122			
Chloroform		0.0238	0.00100	0.02320	0	103	69	128			
Tetrachloroethene		0.0240	0.00100	0.02320	0	103	66	128			
Trichloroethene		0.0248	0.00100	0.02320	0	107	70	127			
Vinyl chloride		0.0219	0.00100	0.02320	0	94.4	50	134			
Surr: 1,2-Dichloroethane-d4		0.193		0.2000		96.7	72	119			
Surr: 4-Bromofluorobenzene		0.195		0.2000		97.7	76	119			
Surr: Dibromofluoromethane		0.197		0.2000		98.3	85	115			
Surr: Toluene-d8		0.194		0.2000		97.1	81	120			

Sample ID	MB-90830 TCLP	Batch ID:	90851	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MLBK	Run ID:	GCMS7_190510B	Analysis Date: 5/10/2019 4:13:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190510B

Sample ID	MB-90830 TCLP	Batch ID:	90851	TestNo:	SW1311/8260C	Units:	mg/L				
SampType:	MBLK	Run ID:	GCMS7_190510B	Analysis Date: 5/10/2019 4:13:00 PM		Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		<0.00300	0.0100								
1,2-Dichloroethane		<0.00300	0.0100								
1,4-Dichlorobenzene		<0.00300	0.0100								
2-Butanone		<0.0500	0.150								
Benzene		<0.00300	0.0100								
Carbon tetrachloride		<0.00300	0.0100								
Chlorobenzene		<0.00300	0.0100								
Chloroform		<0.00300	0.0100								
Tetrachloroethene		<0.00300	0.0100								
Trichloroethene		<0.00300	0.0100								
Vinyl chloride		<0.00300	0.0100								
Surr: 1,2-Dichloroethane-d4		1.95		2.000		97.6	72	119			
Surr: 4-Bromofluorobenzene		1.96		2.000		98.1	76	119			
Surr: Dibromofluoromethane		1.95		2.000		97.6	85	115			
Surr: Toluene-d8		1.98		2.000		99.0	81	120			

Sample ID	1905097-01AMS	Batch ID:	90851	TestNo:	SW1311/8260C	Units:	mg/L				
SampType:	MS	Run ID:	GCMS7_190510B	Analysis Date: 5/10/2019 5:01:00 PM		Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.254	0.0100	0.2320	0	110	68	130			
1,2-Dichloroethane		0.232	0.0100	0.2320	0	99.9	69	132			
1,4-Dichlorobenzene		0.216	0.0100	0.2320	0	92.9	74	123			
2-Butanone		0.988	0.150	1.160	0	85.1	49	136			
Benzene		0.227	0.0100	0.2320	0	97.8	81	122			
Carbon tetrachloride		0.248	0.0100	0.2320	0	107	66	138			
Chlorobenzene		0.218	0.0100	0.2320	0	93.8	81	122			
Chloroform		0.220	0.0100	0.2320	0	94.7	69	128			
Tetrachloroethene		0.228	0.0100	0.2320	0	98.4	66	128			
Trichloroethene		0.237	0.0100	0.2320	0	102	70	127			
Vinyl chloride		0.222	0.0100	0.2320	0	95.9	50	134			
Surr: 1,2-Dichloroethane-d4		1.95		2.000		97.4	72	119			
Surr: 4-Bromofluorobenzene		1.98		2.000		99.1	76	119			
Surr: Dibromofluoromethane		1.98		2.000		98.9	85	115			
Surr: Toluene-d8		1.92		2.000		95.8	81	120			

Sample ID	1905097-01AMSD	Batch ID:	90851	TestNo:	SW1311/8260C	Units:	mg/L				
SampType:	MSD	Run ID:	GCMS7_190510B	Analysis Date: 5/10/2019 5:25:00 PM		Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.248	0.0100	0.2320	0	107	68	130	2.67	20	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 9 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190510B

Sample ID	1905097-01AMSD	Batch ID:	90851	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MSD	Run ID:	GCMS7_190510B	Analysis Date: 5/10/2019 5:25:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichloroethane		0.217	0.0100	0.2320	0	93.7	69	132	6.41	20	
1,4-Dichlorobenzene		0.205	0.0100	0.2320	0	88.4	74	123	4.99	20	
2-Butanone		0.642	0.150	1.160	0	55.3	49	136	42.4	20	R
Benzene		0.213	0.0100	0.2320	0	91.7	81	122	6.37	20	
Carbon tetrachloride		0.234	0.0100	0.2320	0	101	66	138	6.10	20	
Chlorobenzene		0.206	0.0100	0.2320	0	88.9	81	122	5.29	20	
Chloroform		0.208	0.0100	0.2320	0	89.7	69	128	5.38	20	
Tetrachloroethene		0.216	0.0100	0.2320	0	93.3	66	128	5.35	20	
Trichloroethene		0.223	0.0100	0.2320	0	96.3	70	127	5.91	20	
Vinyl chloride		0.188	0.0100	0.2320	0	81.1	50	134	16.7	20	
Surr: 1,2-Dichloroethane-d4		1.95		2.000		97.4	72	119	0	0	
Surr: 4-Bromofluorobenzene		1.95		2.000		97.7	76	119	0	0	
Surr: Dibromofluoromethane		1.99		2.000		99.3	85	115	0	0	
Surr: Toluene-d8		1.92		2.000		96.2	81	120	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 10 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: IGN_190510A

The QC data in batch 90850 applies to the following samples: 1905097-01C

Sample ID	LCS-90850	Batch ID:	90850	TestNo:	SW1010	Units:	°C				
SampType:	LCS	Run ID:	IGN_190510A	Analysis Date:	5/10/2019 4:30:00 PM	Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ignitability		48.2	0	46.65	0	103	95	105			
Sample ID	MB-90850	Batch ID:	90850	TestNo:	SW1010	Units:	°C				
SampType:	MBLK	Run ID:	IGN_190510A	Analysis Date:	5/10/2019 4:30:00 PM	Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ignitability		>100	0								

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 11 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: PH2_190509A

The QC data in batch 90821 applies to the following samples: 1905097-01C

Sample ID	1905081-04A-DUP	Batch ID:	90821	TestNo:	SW9045D	Units:	pH Units@21.4°C
SampType:	DUP	Run ID:	PH2_190509A	Analysis Date:	5/9/2019 1:30:00 PM	Prep Date:	5/9/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
pH		6.77	0	0	6.780	0.148	5
Sample ID	1905098-06C-DUP	Batch ID:	90821	TestNo:	SW9045D	Units:	pH Units@22.1°C
SampType:	DUP	Run ID:	PH2_190509A	Analysis Date:	5/9/2019 1:30:00 PM	Prep Date:	5/9/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
pH		7.38	0	0	7.430	0.675	5

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 12 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_190509A

The QC data in batch 90835 applies to the following samples: 1905097-01C

Sample ID	1905098-03C-DUP	Batch ID:	90835	TestNo:	D2216	Units:	WT%				
SampType:	DUP	Run ID:	PMOIST_190509A	Analysis Date:	5/10/2019 8:32:00 AM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture		24.3	0	0	26.14		7.12	30			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 13 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_190509A

The QC data in batch 90813 applies to the following samples: 1905097-01C

Sample ID	MB-90813	Batch ID:	90813	TestNo:	Sw846 Ch7.3	Units:	mg/Kg				
SampType:	MLBK	Run ID:	UV/VIS_2_190509A	Analysis Date:	5/9/2019 5:12:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Reactive Cyanide		<0.0500	0.100								N
Sample ID	LCS-90813	Batch ID:	90813	TestNo:	Sw846 Ch7.3	Units:	mg/Kg				
SampType:	LCS	Run ID:	UV/VIS_2_190509A	Analysis Date:	5/9/2019 5:13:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Reactive Cyanide		1.25	0.100	40.00	0	3.13	1	10			N

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 14 of 15

CLIENT: Terracon
Work Order: 1905097
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: WC_190509B

The QC data in batch 90813 applies to the following samples: 1905097-01C

Sample ID	MB-90813	Batch ID:	90813	TestNo:	Sw846 Ch7.3	Units:	mg/Kg				
SampType:	MLBK	Run ID:	WC_190509B	Analysis Date:	5/9/2019 3:35:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Reactive Sulfide		<20.0	20.0								N

Sample ID	LCS-90813	Batch ID:	90813	TestNo:	Sw846 Ch7.3	Units:	mg/Kg				
SampType:	LCS	Run ID:	WC_190509B	Analysis Date:	5/9/2019 3:40:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Reactive Sulfide		160	20.0	262.0	0	61.1	25	90			N

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 15 of 15

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



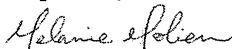
3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 919-4141

Report#/Lab ID#: 592364 **Report Date:** 05/10/19
Project ID: #1905097
Sample Name: WC-15
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/09/19 18:41	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,
 
 Quality Manager Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592364 Matrix: soil

Client: DHL Analytical

Project ID: #1905097

Sample Name: WC-15

Attn: John DuPont

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Date: 5/9/19

Sample IDs: 592364

Samples Checked by: S.O

COC Entry Line	1	2	3	4	5	6	7	8	9	10
a 4 oz soil jar	1									
b 8 oz soil jar										
c 16 oz soil jar										
d 32 oz soil jar										
e Soil VOA vials w/Stir Bar										
f Soil VOA vials (unpres)										
VOA Vials	if Headspace Present (+#s)									
g 40 mL VOA vials (unpres)										
h 40 mL VOA vials (HCl)										
Unpreserved Bottles										
i 500 mL amber (unpres)										
j 950 mL amber (unpres)										
k 8 oz HDPE (unpres)										
l 16 oz HDPE (unpres)										
m 32 oz HDPE (unpres)										
Preserved Bottles										
Acid pH paper CL#	pH									
n 120 mL amber (H ₂ SO ₄)										
o 250 mL amber (H ₂ SO ₄)										
p 500 mL amber (H ₂ SO ₄)										
q 8 oz Nalgene (HNO ₃)										
r 16 oz Nalgene (HNO ₃)										
s 32 oz Nalgene (HNO ₃)										
Base pH paper CL#	pH									
t 8 oz HDPE (NaOH)										
u 8 oz HDPE (ZnAc/NaOH)										
v 16 oz HDPE (Ascorbic acid)										
Air										
w Tedlar bag										
x SUMA canister										
Miscellaneous										
y Sterile Bottle										
z Other										
Bottles in Austin	a									
Bottles in Corpus Christi										
Bottles to Subcontract Lab(s)										

ASI Sample Evaluation

F-0029 V8-100418
Effective Date: 10/04/18
1 of 1

Date: 5/9/19Sample IDs: 592364 # of C-O-Cs: 1Samples Delievery by: Client Bus LSO UPS Fed-Ex ASI/PU Courier Carrier Bill # _____

Sample Receiving		Initials	
Item	Cooler	Y N	Cooler Comment
1	Cooler temperature appropriate	<input checked="" type="checkbox"/>	
2	Samples on ice/from fridge	<input checked="" type="checkbox"/>	
3	Custody Seal Present (if shipped)	<input checked="" type="checkbox"/>	
3a	custody seal was intact	<input checked="" type="checkbox"/>	
3b	custody seal was signed/dated	<input checked="" type="checkbox"/>	

Item	COC	Y N	COC Comment
4	COC received	<input checked="" type="checkbox"/>	
5	COC Complete		
5a	Sample identification	<input checked="" type="checkbox"/>	
5b	Date Collected	<input checked="" type="checkbox"/>	
5c	Time Collected	<input checked="" type="checkbox"/>	
5d	Number of containers	<input checked="" type="checkbox"/>	
5e	Preservation type	<input checked="" type="checkbox"/>	
5f	Matrix	<input checked="" type="checkbox"/>	
5g	Parameters	<input checked="" type="checkbox"/>	
5h	Relinquished by Client	<input checked="" type="checkbox"/>	
6	COC info match sample labels	<input checked="" type="checkbox"/>	
7	Assist with completion of COC	<input type="checkbox"/>	
8	Additional information supplied by client	<input type="checkbox"/>	

Item	Sample Containers	Y N	Sample Container Comments If no for Item 9-10 comment req.
9	Bottles Intact/Integrity OK	<input checked="" type="checkbox"/>	
10	Samples properly labelled/identifiable	<input checked="" type="checkbox"/>	
11	VOA vials headspace OK (if required)	<input type="checkbox"/>	
12	Samples Properly pH Preserved (if required)	<input type="checkbox"/>	
12a	Dissolved Metals field filtered and preserved	<input type="checkbox"/>	
12b	Acid Preserved (pH OK)	<input type="checkbox"/>	
12c	Base Preserved (pH OK)	<input type="checkbox"/>	

Project Management		Initials
Item	Hold Time	Y N
13	Samples received within hold-time	<input checked="" type="checkbox"/>
14	Samples received with time to complete analysis within hold-time	<input checked="" type="checkbox"/>
List of affected parameters:		

Item	Water VOC-VOAs	Y N
15	Special compounds required	<input type="checkbox"/>
If required indicate if received in proper container		
15a	Acrolein (unpreserved-3d from time of sampling)*adjust rush time	<input type="checkbox"/>
15b	Acrolein/Acrylonitrile (pH 4-5)	<input type="checkbox"/>
15c	Vinyl chloride/Styrene/2-chloroethyl vinyl ether (unpreserved)	<input type="checkbox"/>

Item	Bulk Soil Sampling (TPH/VOC/BTEX)	Y N
16	Bulk soil samples received	<input type="checkbox"/>
16a	Petroleum Storage Tank Rule	<input type="checkbox"/>
16b	Client indicated no hydrocarbons in C6-C12 for TPH or high level VOC	<input type="checkbox"/>
16c	Client indicated VOA not used due to sampling difficulty	<input type="checkbox"/>
16d	ASI assesed VOA not used due to sample physical characteristics	<input type="checkbox"/>

Item	Sample Containers	Y N
17	Samples in proper containers excluding items 15 and 16	<input checked="" type="checkbox"/>

Item	COC	
7	Assist with completion of COC	<input type="checkbox"/>
8	Additional information supplied by client	<input type="checkbox"/>
18	Hold requested	<input type="checkbox"/>
19	Sub-contract analysis required	<input type="checkbox"/>

Client notification required due to sample integrity issue identified on the COC or ASI Sample Evaluation Form (F-0029) Method of notification to client: Phone E-Mail Client response: Proceed with analysis Resample and re-submit Method of response: Phone E-Mail

LIVELY DELIVERY SERVICE

2200 GRAND AVENUE PKWY. STE # 103 • AUSTIN, TEXAS 78728
PHONE (512) 491-8116 • FAX (512) 339-0794

Order ID# 16765

Date 5/9/14

Type of Service:	<input type="checkbox"/> All Day	<input checked="" type="checkbox"/> 4 Hour	<input type="checkbox"/> 2 Hour	<input type="checkbox"/> ASAP	Time:
FROM	Name DHL Analytical		TO		
	Address 2300 Double Creek Dr.		Address 3512 Monopolis		
	City Round Rock, TX 78664		City Austin, TX 78744		
	Phone # (512) 388-8222		Phone # (512) 383-5886		
No. Pieces	Description			Weight	
1	<i>Cooler</i>				
3rd Party Billing		Wait Time			
Driver		Time		Charges	
Received by:	<i>Kristine Sauer</i>				
PRINT NAME: <i>Kristine Sauer</i>					

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664

TEL: (512) 388-8222 FAX: (512) 388-8229
Work Order: 1905097

Subcontractor:

Analysys Laboratory TEL: (512) 385-5886
3512 Montopolis FAX:
Austin, TX 78744 Acct #:

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

09-May-19

Sample Id	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests					
					TOX					
WC-15 592364	Soil	-01D	05/08/19 12:30 PM	4-OZGJAR	1					

General Comments:

Please analyze these samples with a 2 - Day Turnaround Time.
Call John DuPont if you have questions.
Quality Control Package Needed: Standard/
EMAIL report to both cac@dhlanalytical.com & dupont@dhlanalytical.com

Relinquished by: <u>E</u>	Date/Time 5/9/19 1030	Received by: <u>S. Ortega ASI</u>	Date/Time 12:30 5/9/19 @ 13:
Relinquished by: _____	Received by: _____	_____	4.3/4.5 T#102 TB/CS 5/9/19



May 21, 2019

Byron Ellington
Terracon
5307 Industrial Oaks Blvd., Suite 160
Austin, Texas 78735
TEL: (512) 442-1122
FAX (512) 442-1181

Order No.: 1905098

RE: Boundary Ventures

Dear Byron Ellington:

DHL Analytical, Inc. received 17 sample(s) on 5/8/2019 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative and all estimated uncertainties of results are within method specifications.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in red ink, appearing to read "John DuPont".

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-19-24



Table of Contents

Miscellaneous Documents	3
CaseNarrative 1905098	6
Analytical Report 1905098	9
AnalyticalQCSummaryReport 1905098	52
Subcontract Report 1905098	113



2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com



Nº 79655
MAIN-OF-CUSTODY

CLIENT: Terracon
ADDRESS: 5307 Industrial Oaks Blvd.
PHONE: (512) 442-1122 FAX/E-MAIL:
DATA REPORTED TO: Byron Ellington
ADDITIONAL REPORT COPIES TO:

DATE: 5/8/19 PAGE 1 OF 2
PO #: DHL WORK ORDER #: 1905098
PROJECT LOCATION OR NAME: Bethany Ventures
CLIENT PROJECT #: 96187C01 COLLECTOR: CPA/ADR

FIELD NOTES

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	TURN AROUND TIME	LABORATORY USE ONLY:
	5/8/19 1630		RUSH <input type="checkbox"/> CALL FIRST 1 DAY <input type="checkbox"/> CALL FIRST 2 DAY <input type="checkbox"/> NORMAL <input type="checkbox"/> OTHER <input type="checkbox"/> _____	RECEIVING TEMP: <u>52.2</u> THERM #: <u>78</u>
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	CUSTODY SEALS: <input type="checkbox"/> BROKEN <input type="checkbox"/> INTACT <input checked="" type="checkbox"/> NOT USED	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	CARRIER: <input type="checkbox"/> LONE STAR <input type="checkbox"/> FEDEX <input type="checkbox"/> UPS <input type="checkbox"/> OTHER <input type="checkbox"/> COURIER DELIVERY <input checked="" type="checkbox"/> HAND DELIVERED	
<input type="checkbox"/> DHL DISPOSAL @ \$5.00 each		<input type="checkbox"/> Return	DHL COC Rev 1 FEB 201	



2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com



Nº 79656

CHAIN-OF-CUSTODY

CLIENT: Hercon
ADDRESS: 5307 Industrial Oaks Blvd
PHONE: (572) 442-1122 FAX/E-MAIL:
DATA REPORTED TO: Byron Ellington
ADDITIONAL REPORT COPIES TO:

DATE: 5/8/19

PAGE 2 OF ~~2~~ 2

Authorize 5% surcharge for TRRP Report?	S=SOIL P=PAINT W=WATER SL=SLUDGE A=AIR O=OTHER L=LIQUID SO=SOLID SE=SEDIMENT
<input type="checkbox"/> Yes <input type="checkbox"/> No	

PO #: _____ DHL WORK ORDER #: 1405098

PROJECT LOCATION OR NAME: Bordend Venture

CLIENT PROJECT #: 96187C01 COLLECTOR: LPE/ADR

RElinquished BY: (Signature)

DATE/TIME _____ RECEIVED BY: (Signature) _____

TURN AROUND TIME

LABORATORY USE ONLY

RECEIVING TEMP: 52.2-82 THERM #: 78

BEING QUITTED BY: (Signature)

DATE/TIME RECEIVED BY: (Signature)

RUSH CALL FIRST

SUGGESTED USES — **TO TREAT** — **FOR** — **DO**

RELINQUISHED BY: (Signature)

DATE/TIME **RECEIVED BY: (Signature)**

2 DAY □

CARRIER: LONE STAR FEDEX UPS OTHER
 COURIER DELIVERY

DHL DISPOSAL @ \$5.00 each

 Return

DHI_GOC Rev 1 | FEB 2010

Sample Receipt Checklist

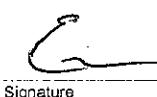
Client Name Terracon

Date Received: 5/8/2019

Work Order Number 1905098

Received by EL

Checklist completed by:



Signature

5/9/2019

Date

Reviewed by



5/9/2019

Date

Carrier name Hand Delivered

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	5.2 °C
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH<2 acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> LOT # _____
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/> LOT # _____
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted _____

Date contacted: _____

Person contacted _____

Contacted by: _____

Regarding: _____

Comments: _____

Corrective Action

CLIENT: Terracon
Project: Boundary Ventures
Lab Order: 1905098

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

For Semivolatiles analysis samples WC-10 and WC-16 had low internal responses for the internal standards Acenaphthene-d10 and Phenanthrene-d10. All associated compounds are being reported from the 100x dilution. No further corrective actions were taken.

For Semivolatiles analysis sample WC-17 had low internal responses for the internal standards Naphthalene-d8 and Perylene-d12. All associated compounds are being reported from the 100x dilution. No further corrective actions were taken.

For Semivolatiles analysis sample WC-17 was diluted prior to analysis due to the nature of the sample (matrix).

All method blanks, sample duplicates, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following.

For Metals analysis by method SW6020A (batch 90856) Sodium was detected below the reporting limit in the method blank (MB-90856). The associated samples (WC-10, WC-16 & WC-17) were detected greater than 10 times the amount in the blank for this analyte. No further corrective actions were taken.

For Volatiles analysis by method SW8260C (batch 90888) Methylene chloride was detected above the reporting limit in the method blank (MB-90888). The associated samples (WC-10, WC-16 & WC-17) were below detection limits for this compound. No further corrective actions were taken.

For Metals analysis by method SW6020A (batch 90856) the matrix spike and matrix spike duplicate recoveries were above control limits for six analytes. These are flagged accordingly in the enclosed QC summary report. The "S" flag denotes spike recovery was outside control limits. The LCS was within control limits for these analytes. No further corrective actions were taken.

For Semivolatiles analysis by method SW8270D (batch 90823) the matrix spike and matrix spike duplicate recoveries were out of control limits for a total of eighteen compounds. In addition, the matrix spike and matrix spike duplicate had the RPD above control limits for nine compounds. This was due to the concentration of compounds in the parent sample. These are flagged accordingly. The "S" flag denotes spike recovery was outside control limits and the "R" flag denotes the RPD was outside control limits. The LCS was within control limits for these compounds. No further corrective actions were taken.

CLIENT: Terracon
Project: Boundary Ventures
Lab Order: 1905098

CASE NARRATIVE

For Mercury analysis by method SW7471B (batch 90846) the matrix spike and matrix spike duplicate recoveries were slightly below control limits. These are flagged accordingly. The "S" flag denotes spike recovery was outside control limits. The LCS was within control limits. No further corrective actions were taken.

For TCLP Semivolatiles analysis by method SW1311/8270D (batch 90877) the matrix spike and matrix spike duplicate recoveries were below control limits for Pentachlorophenol. In addition, the matrix spike and matrix spike duplicate had the RPD slightly above control limits for Pentachlorophenol. These are flagged accordingly. The "S" flag denotes spike recovery was outside control limits and the "R" flag denotes the RPD was outside control limits. The LCS was within control limits for this compound. No further corrective actions were taken.

For TCLP Volatiles analysis by method SW1311/8260C (batch 90951) the matrix spike and matrix spike duplicate recoveries were above control limits for Chloroform. These are flagged accordingly. The "S" flag denotes spike recovery was outside control limits. The LCS was within control limits for this compound. No further corrective actions were taken.

For Volatiles analysis by method SW8260C (batch 90899) the LCS recovery was slightly below control limits for Chloroethane. This is flagged accordingly. No further corrective actions were taken.

For Semivolatiles analysis by method SW8270D (batch 90823) the LCS recovery was slightly above control limits for 4-Bromophenyl phenyl ether. This is flagged accordingly. No further corrective actions were taken.

For Metals analysis by method SW6020A (batch 90856) the PDS recovery was above control limits for Barium and Manganese. These are flagged accordingly. The serial dilution was within control limits for these analytes. No further corrective actions were taken.

For Metals analysis by method SW6020A (batch 90856) the RPD for the serial dilution was slightly above control limits for three analytes. These are flagged accordingly. The PDS was within control limits for these analytes. No further corrective actions were taken.

For TCLP Semivolatiles analysis by method SW1311/8270D the surrogate recovery for sample WC-3 was below control limits for 2,4,6-Tribromophenol. This is flagged accordingly. The remaining surrogates were within control limits. No further corrective actions were taken.

For Semivolatiles analysis by method SW8270D the surrogate recoveries for samples WC-10, WC-16 and WC-17 were out of control limits for most surrogates at various dilutions. This was due to matrix interference. These are flagged accordingly. The remaining surrogates were within control limits. No further corrective actions were taken.

CLIENT: Terracon
Project: Boundary Ventures
Lab Order: 1905098

CASE NARRATIVE

For Semivolatiles analysis by method SW8270D the surrogate recovery for the method blank (batch 90823) was slightly above control limits for 4-Terphenyl-d14. This is flagged accordingly. The remaining surrogates were within control limits. No further corrective actions were taken.

For Volatiles analysis by method SW8260C the surrogate recoveries for samples WC-16, and WC-17 were above control limits for 4-Bromofluorobenzene at the 1x. These are flagged accordingly. The remaining surrogates were within control limits. No further corrective actions were taken.

The results of the associated TCLP samples were below TCLP or RCRA characterization limits.

The TOX analysis was sub-contracted to Analysys Laboratories.

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-1
Project:	Boundary Ventures	Lab ID:	1905098-01
Project No:	96187101	Collection Date:	05/08/19 12:35 PM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/15/19 02:11 PM
TCLP METALS							
Antimony	0.00427	0.00400	0.0125	J	mg/L	1	05/15/19 03:16 PM
Arsenic	0.0173	0.0100	0.0250	J	mg/L	1	05/15/19 03:16 PM
Barium	1.01	0.0150	0.0500		mg/L	1	05/15/19 03:16 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:16 PM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:16 PM
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:16 PM
Lead	0.00152	0.00150	0.00500	J	mg/L	1	05/15/19 03:16 PM
Nickel	<0.0150	0.0150	0.0500		mg/L	1	05/15/19 03:16 PM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:16 PM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/15/19 03:16 PM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
2,4,5-Trichlorophenol	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
2,4,6-Trichlorophenol	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
2,4-Dinitrotoluene	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
2-Methylphenol	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
3&4-Methylphenol	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
Hexachlorobenzene	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
Hexachlorobutadiene	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
Hexachloroethane	<0.00952	0.00952	0.0381		mg/L	1	05/15/19 05:50 PM
Nitrobenzene	<0.0190	0.0190	0.0381		mg/L	1	05/15/19 05:50 PM
Pentachlorophenol	<0.0190	0.0190	0.0381		mg/L	1	05/15/19 05:50 PM
Pyridine	<0.0381	0.0381	0.0952		mg/L	1	05/15/19 05:50 PM
Surr: 2,4,6-Tribromophenol	88.8	0	42-124		%REC	1	05/15/19 05:50 PM
Surr: 2-Fluorobiphenyl	66.0	0	48-120		%REC	1	05/15/19 05:50 PM
Surr: 2-Fluorophenol	62.5	0	20-120		%REC	1	05/15/19 05:50 PM
Surr: 4-Terphenyl-d14	75.0	0	51-135		%REC	1	05/15/19 05:50 PM
Surr: Nitrobenzene-d5	73.8	0	41-120		%REC	1	05/15/19 05:50 PM
Surr: Phenol-d5	64.5	0	20-120		%REC	1	05/15/19 05:50 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/15/19 04:24 PM
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 DF Dilution Factor
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
 E TPH pattern not Gas or Diesel Range Pattern
 MDL Method Detection Limit
 RL Reporting Limit
 N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-1
Project: Boundary Ventures **Lab ID:** 1905098-01
Project No: 96187101 **Collection Date:** 05/08/19 12:35 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/15/19 04:24 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:24 PM
Surr: 1,2-Dichloroethane-d4	104	0	72-119	%REC		10	05/15/19 04:24 PM
Surr: 4-Bromofluorobenzene	95.7	0	76-119	%REC		10	05/15/19 04:24 PM
Surr: Dibromofluoromethane	104	0	85-115	%REC		10	05/15/19 04:24 PM
Surr: Toluene-d8	97.4	0	81-120	%REC		10	05/15/19 04:24 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.575	0.575	0.575	N	mg/Kg-dry	1	05/09/19 08:25 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/14/19 10:45 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.49	0	0		pH Units@21.6°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	13.0	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0494	0.0494	0.0988	N	mg/Kg	1	05/09/19 05:13 PM
Reactive Sulfide	<19.8	19.8	19.8	N	mg/Kg	1	05/09/19 04:00 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-2
Project: Boundary Ventures **Lab ID:** 1905098-02
Project No: 96187101 **Collection Date:** 05/08/19 01:00 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/15/19 02:13 PM
TCLP METALS							
Antimony	0.0107	0.00400	0.0125	J	mg/L	1	05/15/19 03:18 PM
Arsenic	0.0184	0.0100	0.0250	J	mg/L	1	05/15/19 03:18 PM
Barium	0.192	0.0150	0.0500		mg/L	1	05/15/19 03:18 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:18 PM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:18 PM
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:18 PM
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:18 PM
Nickel	0.0976	0.0150	0.0500		mg/L	1	05/15/19 03:18 PM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:18 PM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/15/19 03:18 PM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00967	0.00967	0.0387		mg/L	1	05/15/19 06:12 PM
2,4,5-Trichlorophenol	<0.00967	0.00967	0.0387		mg/L	1	05/15/19 06:12 PM
2,4,6-Trichlorophenol	<0.00967	0.00967	0.0387		mg/L	1	05/15/19 06:12 PM
2,4-Dinitrotoluene	<0.00967	0.00967	0.0387		mg/L	1	05/15/19 06:12 PM
2-Methylphenol	<0.00967	0.00967	0.0387		mg/L	1	05/15/19 06:12 PM
3&4-Methylphenol	0.0161	0.00967	0.0387	J	mg/L	1	05/15/19 06:12 PM
Hexachlorobenzene	<0.00967	0.00967	0.0387		mg/L	1	05/15/19 06:12 PM
Hexachlorobutadiene	<0.00967	0.00967	0.0387		mg/L	1	05/15/19 06:12 PM
Hexachloroethane	<0.00967	0.00967	0.0387		mg/L	1	05/15/19 06:12 PM
Nitrobenzene	<0.0193	0.0193	0.0387		mg/L	1	05/15/19 06:12 PM
Pentachlorophenol	<0.0193	0.0193	0.0387		mg/L	1	05/15/19 06:12 PM
Pyridine	<0.0387	0.0387	0.0967		mg/L	1	05/15/19 06:12 PM
Surr: 2,4,6-Tribromophenol	113	0	42-124		%REC	1	05/15/19 06:12 PM
Surr: 2-Fluorobiphenyl	78.5	0	48-120		%REC	1	05/15/19 06:12 PM
Surr: 2-Fluorophenol	81.3	0	20-120		%REC	1	05/15/19 06:12 PM
Surr: 4-Terphenyl-d14	92.0	0	51-135		%REC	1	05/15/19 06:12 PM
Surr: Nitrobenzene-d5	92.0	0	41-120		%REC	1	05/15/19 06:12 PM
Surr: Phenol-d5	84.5	0	20-120		%REC	1	05/15/19 06:12 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/15/19 04:48 PM
Benzene	0.0238	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-2
Project: Boundary Ventures **Lab ID:** 1905098-02
Project No: 96187101 **Collection Date:** 05/08/19 01:00 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/15/19 04:48 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 04:48 PM
Surr: 1,2-Dichloroethane-d4	103	0	72-119	%REC		10	05/15/19 04:48 PM
Surr: 4-Bromofluorobenzene	98.1	0	76-119	%REC		10	05/15/19 04:48 PM
Surr: Dibromofluoromethane	102	0	85-115	%REC		10	05/15/19 04:48 PM
Surr: Toluene-d8	96.0	0	81-120	%REC		10	05/15/19 04:48 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	12.5	0.711	0.711	N	mg/Kg-dry	1	05/09/19 08:29 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/14/19 10:45 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.47	0	0		pH Units@21.6°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	29.7	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0493	0.0493	0.0985	N	mg/Kg	1	05/09/19 05:13 PM
Reactive Sulfide	<19.7	19.7	19.7	N	mg/Kg	1	05/09/19 04:03 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID: WC-3						
Project:	Boundary Ventures	Lab ID: 1905098-03						
Project No:	96187101	Collection Date: 05/08/19 12:45 PM						
Lab Order:	1905098	Matrix: SOIL						
Analyses		Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY			SW1311/7470A				Analyst: BM	
Mercury	<0.000400	0.000400	0.00100			mg/L	1	05/15/19 02:15 PM
TCLP METALS			SW1311/6020A				Analyst: RO	
Antimony	0.0173	0.00400	0.0125			mg/L	1	05/15/19 03:21 PM
Arsenic	0.0335	0.0100	0.0250			mg/L	1	05/15/19 03:21 PM
Barium	0.234	0.0150	0.0500			mg/L	1	05/15/19 03:21 PM
Beryllium	<0.00150	0.00150	0.00500			mg/L	1	05/15/19 03:21 PM
Cadmium	<0.00150	0.00150	0.00500			mg/L	1	05/15/19 03:21 PM
Chromium	0.0112	0.0100	0.0250	J		mg/L	1	05/15/19 03:21 PM
Lead	<0.00150	0.00150	0.00500			mg/L	1	05/15/19 03:21 PM
Nickel	0.0575	0.0150	0.0500			mg/L	1	05/15/19 03:21 PM
Selenium	<0.0100	0.0100	0.0250			mg/L	1	05/15/19 03:21 PM
Silver	<0.00500	0.00500	0.0100			mg/L	1	05/15/19 03:21 PM
TCLP SEMI-VOLATILES			SW1311/8270D				Analyst: LG	
1,4-Dichlorobenzene	<0.00982	0.00982	0.0393			mg/L	1	05/15/19 06:34 PM
2,4,5-Trichlorophenol	<0.00982	0.00982	0.0393			mg/L	1	05/15/19 06:34 PM
2,4,6-Trichlorophenol	<0.00982	0.00982	0.0393			mg/L	1	05/15/19 06:34 PM
2,4-Dinitrotoluene	<0.00982	0.00982	0.0393			mg/L	1	05/15/19 06:34 PM
2-Methylphenol	<0.00982	0.00982	0.0393			mg/L	1	05/15/19 06:34 PM
3&4-Methylphenol	0.0159	0.00982	0.0393	J		mg/L	1	05/15/19 06:34 PM
Hexachlorobenzene	<0.00982	0.00982	0.0393			mg/L	1	05/15/19 06:34 PM
Hexachlorobutadiene	<0.00982	0.00982	0.0393			mg/L	1	05/15/19 06:34 PM
Hexachloroethane	<0.00982	0.00982	0.0393			mg/L	1	05/15/19 06:34 PM
Nitrobenzene	<0.0196	0.0196	0.0393			mg/L	1	05/15/19 06:34 PM
Pentachlorophenol	<0.0196	0.0196	0.0393			mg/L	1	05/15/19 06:34 PM
Pyridine	<0.0393	0.0393	0.0982			mg/L	1	05/15/19 06:34 PM
Surr: 2,4,6-Tribromophenol	8.25	0	42-124	S	%REC		1	05/15/19 06:34 PM
Surr: 2-Fluorobiphenyl	81.8	0	48-120		%REC		1	05/15/19 06:34 PM
Surr: 2-Fluorophenol	30.8	0	20-120		%REC		1	05/15/19 06:34 PM
Surr: 4-Terphenyl-d14	93.0	0	51-135		%REC		1	05/15/19 06:34 PM
Surr: Nitrobenzene-d5	91.3	0	41-120		%REC		1	05/15/19 06:34 PM
Surr: Phenol-d5	26.8	0	20-120		%REC		1	05/15/19 06:34 PM
TCLP VOLATILES			SW1311/8260C				Analyst: DEW	
1,1-Dichloroethene	<0.00300	0.00300	0.0100			mg/L	10	05/15/19 05:12 PM
1,2-Dichloroethane	0.00460	0.00300	0.0100	J		mg/L	10	05/15/19 05:12 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100			mg/L	10	05/15/19 05:12 PM
2-Butanone	<0.0500	0.0500	0.150			mg/L	10	05/15/19 05:12 PM
Benzene	0.0145	0.00300	0.0100			mg/L	10	05/15/19 05:12 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-3
Project: Boundary Ventures **Lab ID:** 1905098-03
Project No: 96187101 **Collection Date:** 05/08/19 12:45 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:12 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:12 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/15/19 05:12 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:12 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:12 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:12 PM
Surr: 1,2-Dichloroethane-d4	103	0	72-119	%REC		10	05/15/19 05:12 PM
Surr: 4-Bromofluorobenzene	93.2	0	76-119	%REC		10	05/15/19 05:12 PM
Surr: Dibromofluoromethane	102	0	85-115	%REC		10	05/15/19 05:12 PM
Surr: Toluene-d8	97.0	0	81-120	%REC		10	05/15/19 05:12 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	1.73	0.677	0.677	N	mg/Kg-dry	1	05/09/19 08:33 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/14/19 10:45 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	10.71	0	0		pH Units@21.5°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	26.1	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0471	0.0471	0.0943	N	mg/Kg	1	05/09/19 05:14 PM
Reactive Sulfide	<18.9	18.9	18.9	N	mg/Kg	1	05/09/19 04:07 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID: WC-4						
Project:	Boundary Ventures	Lab ID: 1905098-04						
Project No:	96187101	Collection Date: 05/08/19 12:08 PM						
Lab Order:	1905098	Matrix: SOIL						
Analyses		Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY		SW1311/7470A						Analyst: BM
Mercury	<0.000400	0.000400	0.00100			mg/L	1	05/15/19 02:18 PM
TCLP METALS		SW1311/6020A						Analyst: RO
Antimony	<0.00400	0.00400	0.0125			mg/L	1	05/15/19 03:12 PM
Arsenic	0.0148	0.0100	0.0250	J		mg/L	1	05/15/19 03:12 PM
Barium	0.742	0.0150	0.0500			mg/L	1	05/15/19 03:12 PM
Beryllium	<0.00150	0.00150	0.00500			mg/L	1	05/15/19 03:12 PM
Cadmium	<0.00150	0.00150	0.00500			mg/L	1	05/15/19 03:12 PM
Chromium	<0.0100	0.0100	0.0250			mg/L	1	05/15/19 03:12 PM
Lead	<0.00150	0.00150	0.00500			mg/L	1	05/15/19 03:12 PM
Nickel	<0.0150	0.0150	0.0500			mg/L	1	05/15/19 03:12 PM
Selenium	<0.0100	0.0100	0.0250			mg/L	1	05/15/19 03:12 PM
Silver	<0.00500	0.00500	0.0100			mg/L	1	05/15/19 03:12 PM
TCLP SEMI-VOLATILES		SW1311/8270D						Analyst: LG
1,4-Dichlorobenzene	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
2,4,5-Trichlorophenol	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
2,4,6-Trichlorophenol	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
2,4-Dinitrotoluene	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
2-Methylphenol	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
3&4-Methylphenol	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
Hexachlorobenzene	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
Hexachlorobutadiene	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
Hexachloroethane	<0.00926	0.00926	0.0370			mg/L	1	05/15/19 06:57 PM
Nitrobenzene	<0.0185	0.0185	0.0370			mg/L	1	05/15/19 06:57 PM
Pentachlorophenol	<0.0185	0.0185	0.0370			mg/L	1	05/15/19 06:57 PM
Pyridine	<0.0370	0.0370	0.0926			mg/L	1	05/15/19 06:57 PM
Surr: 2,4,6-Tribromophenol	94.8	0	42-124			%REC	1	05/15/19 06:57 PM
Surr: 2-Fluorobiphenyl	79.5	0	48-120			%REC	1	05/15/19 06:57 PM
Surr: 2-Fluorophenol	81.0	0	20-120			%REC	1	05/15/19 06:57 PM
Surr: 4-Terphenyl-d14	88.0	0	51-135			%REC	1	05/15/19 06:57 PM
Surr: Nitrobenzene-d5	93.0	0	41-120			%REC	1	05/15/19 06:57 PM
Surr: Phenol-d5	82.3	0	20-120			%REC	1	05/15/19 06:57 PM
TCLP VOLATILES		SW1311/8260C						Analyst: DEW
1,1-Dichloroethene	<0.00300	0.00300	0.0100			mg/L	10	05/15/19 05:36 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100			mg/L	10	05/15/19 05:36 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100			mg/L	10	05/15/19 05:36 PM
2-Butanone	<0.0500	0.0500	0.150			mg/L	10	05/15/19 05:36 PM
Benzene	<0.00300	0.00300	0.0100			mg/L	10	05/15/19 05:36 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-4
Project: Boundary Ventures **Lab ID:** 1905098-04
Project No: 96187101 **Collection Date:** 05/08/19 12:08 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:36 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:36 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/15/19 05:36 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:36 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:36 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 05:36 PM
Surr: 1,2-Dichloroethane-d4	100	0	72-119	%REC		10	05/15/19 05:36 PM
Surr: 4-Bromofluorobenzene	95.1	0	76-119	%REC		10	05/15/19 05:36 PM
Surr: Dibromofluoromethane	101	0	85-115	%REC		10	05/15/19 05:36 PM
Surr: Toluene-d8	96.7	0	81-120	%REC		10	05/15/19 05:36 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.692	0.692	0.692	N	mg/Kg-dry	1	05/09/19 07:59 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/14/19 10:45 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.56	0	0		pH Units@21.3°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	27.7	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0495	0.0495	0.0990	N	mg/Kg	1	05/09/19 05:15 PM
Reactive Sulfide	<19.8	19.8	19.8	N	mg/Kg	1	05/09/19 04:10 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-5
Project:	Boundary Ventures	Lab ID:	1905098-05
Project No:	96187101	Collection Date:	05/08/19 12:20 PM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/15/19 02:29 PM
TCLP METALS							
Antimony	0.00573	0.00400	0.0125	J	mg/L	1	05/15/19 03:23 PM
Arsenic	0.0115	0.0100	0.0250	J	mg/L	1	05/15/19 03:23 PM
Barium	0.315	0.0150	0.0500		mg/L	1	05/15/19 03:23 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:23 PM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:23 PM
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:23 PM
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:23 PM
Nickel	<0.0150	0.0150	0.0500		mg/L	1	05/15/19 03:23 PM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:23 PM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/15/19 03:23 PM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
2,4,5-Trichlorophenol	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
2,4,6-Trichlorophenol	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
2,4-Dinitrotoluene	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
2-Methylphenol	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
3&4-Methylphenol	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
Hexachlorobenzene	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
Hexachlorobutadiene	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
Hexachloroethane	<0.00936	0.00936	0.0375		mg/L	1	05/15/19 07:19 PM
Nitrobenzene	<0.0187	0.0187	0.0375		mg/L	1	05/15/19 07:19 PM
Pentachlorophenol	<0.0187	0.0187	0.0375		mg/L	1	05/15/19 07:19 PM
Pyridine	<0.0375	0.0375	0.0936		mg/L	1	05/15/19 07:19 PM
Surr: 2,4,6-Tribromophenol	98.0	0	42-124		%REC	1	05/15/19 07:19 PM
Surr: 2-Fluorobiphenyl	75.8	0	48-120		%REC	1	05/15/19 07:19 PM
Surr: 2-Fluorophenol	73.5	0	20-120		%REC	1	05/15/19 07:19 PM
Surr: 4-Terphenyl-d14	89.5	0	51-135		%REC	1	05/15/19 07:19 PM
Surr: Nitrobenzene-d5	85.8	0	41-120		%REC	1	05/15/19 07:19 PM
Surr: Phenol-d5	77.0	0	20-120		%REC	1	05/15/19 07:19 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/15/19 06:00 PM
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-5
Project: Boundary Ventures **Lab ID:** 1905098-05
Project No: 96187101 **Collection Date:** 05/08/19 12:20 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/15/19 06:00 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:00 PM
Surr: 1,2-Dichloroethane-d4	102	0	72-119	%REC		10	05/15/19 06:00 PM
Surr: 4-Bromofluorobenzene	95.9	0	76-119	%REC		10	05/15/19 06:00 PM
Surr: Dibromofluoromethane	102	0	85-115	%REC		10	05/15/19 06:00 PM
Surr: Toluene-d8	96.4	0	81-120	%REC		10	05/15/19 06:00 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.674	0.674	0.674	N	mg/Kg-dry	1	05/09/19 08:24 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/16/19 10:00 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.32	0	0		pH Units@21.6°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	25.8	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0482	0.0482	0.0964	N	mg/Kg	1	05/09/19 05:15 PM
Reactive Sulfide	<19.3	19.3	19.3	N	mg/Kg	1	05/09/19 04:15 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-6
Project:	Boundary Ventures	Lab ID:	1905098-06
Project No:	96187101	Collection Date:	05/08/19 12:21 PM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/15/19 02:31 PM
TCLP METALS							
Antimony	0.00727	0.00400	0.0125	J	mg/L	1	05/15/19 03:25 PM
Arsenic	0.0164	0.0100	0.0250	J	mg/L	1	05/15/19 03:25 PM
Barium	0.300	0.0150	0.0500		mg/L	1	05/15/19 03:25 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:25 PM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:25 PM
Chromium	0.0235	0.0100	0.0250	J	mg/L	1	05/15/19 03:25 PM
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:25 PM
Nickel	<0.0150	0.0150	0.0500		mg/L	1	05/15/19 03:25 PM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:25 PM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/15/19 03:25 PM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
2,4,5-Trichlorophenol	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
2,4,6-Trichlorophenol	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
2,4-Dinitrotoluene	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
2-Methylphenol	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
3&4-Methylphenol	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
Hexachlorobenzene	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
Hexachlorobutadiene	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
Hexachloroethane	<0.00977	0.00977	0.0391		mg/L	1	05/15/19 08:04 PM
Nitrobenzene	<0.0195	0.0195	0.0391		mg/L	1	05/15/19 08:04 PM
Pentachlorophenol	<0.0195	0.0195	0.0391		mg/L	1	05/15/19 08:04 PM
Pyridine	<0.0391	0.0391	0.0977		mg/L	1	05/15/19 08:04 PM
Surr: 2,4,6-Tribromophenol	101	0	42-124		%REC	1	05/15/19 08:04 PM
Surr: 2-Fluorobiphenyl	81.5	0	48-120		%REC	1	05/15/19 08:04 PM
Surr: 2-Fluorophenol	81.2	0	20-120		%REC	1	05/15/19 08:04 PM
Surr: 4-Terphenyl-d14	88.8	0	51-135		%REC	1	05/15/19 08:04 PM
Surr: Nitrobenzene-d5	93.5	0	41-120		%REC	1	05/15/19 08:04 PM
Surr: Phenol-d5	86.5	0	20-120		%REC	1	05/15/19 08:04 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/15/19 06:25 PM
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 DF Dilution Factor
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
 E TPH pattern not Gas or Diesel Range Pattern
 MDL Method Detection Limit
 RL Reporting Limit
 N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-6
Project: Boundary Ventures **Lab ID:** 1905098-06
Project No: 96187101 **Collection Date:** 05/08/19 12:21 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/15/19 06:25 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:25 PM
Surr: 1,2-Dichloroethane-d4	102	0	72-119	%REC		10	05/15/19 06:25 PM
Surr: 4-Bromofluorobenzene	97.2	0	76-119	%REC		10	05/15/19 06:25 PM
Surr: Dibromofluoromethane	101	0	85-115	%REC		10	05/15/19 06:25 PM
Surr: Toluene-d8	95.8	0	81-120	%REC		10	05/15/19 06:25 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.645	0.645	0.645	N	mg/Kg-dry	1	05/09/19 08:08 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/16/19 10:00 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.43	0	0		pH Units@21.5°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	22.5	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0491	0.0491	0.0982	N	mg/Kg	1	05/09/19 05:15 PM
Reactive Sulfide	19.6	19.6	19.6	N	mg/Kg	1	05/09/19 04:18 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-7
Project:	Boundary Ventures	Lab ID:	1905098-07
Project No:	96187101	Collection Date:	05/08/19 11:00 AM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/15/19 02:33 PM
TCLP METALS							
Antimony	0.00857	0.00400	0.0125	J	mg/L	1	05/15/19 03:27 PM
Arsenic	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:27 PM
Barium	0.984	0.0150	0.0500		mg/L	1	05/15/19 03:27 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:27 PM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:27 PM
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:27 PM
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:27 PM
Nickel	0.0594	0.0150	0.0500		mg/L	1	05/15/19 03:27 PM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:27 PM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/15/19 03:27 PM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
2,4,5-Trichlorophenol	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
2,4,6-Trichlorophenol	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
2,4-Dinitrotoluene	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
2-Methylphenol	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
3&4-Methylphenol	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
Hexachlorobenzene	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
Hexachlorobutadiene	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
Hexachloroethane	<0.00907	0.00907	0.0363		mg/L	1	05/15/19 09:57 PM
Nitrobenzene	<0.0181	0.0181	0.0363		mg/L	1	05/15/19 09:57 PM
Pentachlorophenol	<0.0181	0.0181	0.0363		mg/L	1	05/15/19 09:57 PM
Pyridine	<0.0363	0.0363	0.0907		mg/L	1	05/15/19 09:57 PM
Surr: 2,4,6-Tribromophenol	99.8	0	42-124		%REC	1	05/15/19 09:57 PM
Surr: 2-Fluorobiphenyl	77.5	0	48-120		%REC	1	05/15/19 09:57 PM
Surr: 2-Fluorophenol	77.5	0	20-120		%REC	1	05/15/19 09:57 PM
Surr: 4-Terphenyl-d14	90.0	0	51-135		%REC	1	05/15/19 09:57 PM
Surr: Nitrobenzene-d5	89.0	0	41-120		%REC	1	05/15/19 09:57 PM
Surr: Phenol-d5	82.0	0	20-120		%REC	1	05/15/19 09:57 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/15/19 06:49 PM
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 DF Dilution Factor
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
 E TPH pattern not Gas or Diesel Range Pattern
 MDL Method Detection Limit
 RL Reporting Limit
 N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-7
Project: Boundary Ventures **Lab ID:** 1905098-07
Project No: 96187101 **Collection Date:** 05/08/19 11:00 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/15/19 06:49 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/15/19 06:49 PM
Surr: 1,2-Dichloroethane-d4	103	0	72-119	%REC		10	05/15/19 06:49 PM
Surr: 4-Bromofluorobenzene	95.0	0	76-119	%REC		10	05/15/19 06:49 PM
Surr: Dibromofluoromethane	104	0	85-115	%REC		10	05/15/19 06:49 PM
Surr: Toluene-d8	97.6	0	81-120	%REC		10	05/15/19 06:49 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.614	0.614	0.614	N	mg/Kg-dry	1	05/09/19 08:12 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/16/19 10:00 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	8.81	0	0		pH Units@21.5°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	18.5	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0489	0.0489	0.0978	N	mg/Kg	1	05/09/19 05:16 PM
Reactive Sulfide	<19.6	19.6	19.6	N	mg/Kg	1	05/09/19 04:22 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-8
Project: Boundary Ventures **Lab ID:** 1905098-08
Project No: 96187101 **Collection Date:** 05/08/19 11:10 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/15/19 03:47 PM
TCLP METALS							
Antimony	0.00412	0.00400	0.0125	J	mg/L	1	05/15/19 03:30 PM
Arsenic	0.0167	0.0100	0.0250	J	mg/L	1	05/15/19 03:30 PM
Barium	0.596	0.0150	0.0500		mg/L	1	05/15/19 03:30 PM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:30 PM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:30 PM
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:30 PM
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/15/19 03:30 PM
Nickel	<0.0150	0.0150	0.0500		mg/L	1	05/15/19 03:30 PM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/15/19 03:30 PM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/15/19 03:30 PM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
2,4,5-Trichlorophenol	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
2,4,6-Trichlorophenol	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
2,4-Dinitrotoluene	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
2-Methylphenol	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
3&4-Methylphenol	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
Hexachlorobenzene	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
Hexachlorobutadiene	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
Hexachloroethane	<0.00942	0.00942	0.0377		mg/L	1	05/15/19 08:27 PM
Nitrobenzene	<0.0188	0.0188	0.0377		mg/L	1	05/15/19 08:27 PM
Pentachlorophenol	<0.0188	0.0188	0.0377		mg/L	1	05/15/19 08:27 PM
Pyridine	<0.0377	0.0377	0.0942		mg/L	1	05/15/19 08:27 PM
Surr: 2,4,6-Tribromophenol	80.3	0	42-124		%REC	1	05/15/19 08:27 PM
Surr: 2-Fluorobiphenyl	71.8	0	48-120		%REC	1	05/15/19 08:27 PM
Surr: 2-Fluorophenol	71.5	0	20-120		%REC	1	05/15/19 08:27 PM
Surr: 4-Terphenyl-d14	83.3	0	51-135		%REC	1	05/15/19 08:27 PM
Surr: Nitrobenzene-d5	82.5	0	41-120		%REC	1	05/15/19 08:27 PM
Surr: Phenol-d5	75.8	0	20-120		%REC	1	05/15/19 08:27 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/16/19 03:46 PM
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-8
Project: Boundary Ventures **Lab ID:** 1905098-08
Project No: 96187101 **Collection Date:** 05/08/19 11:10 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/16/19 03:46 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 03:46 PM
Surr: 1,2-Dichloroethane-d4	109	0	72-119	%REC		10	05/16/19 03:46 PM
Surr: 4-Bromofluorobenzene	101	0	76-119	%REC		10	05/16/19 03:46 PM
Surr: Dibromofluoromethane	102	0	85-115	%REC		10	05/16/19 03:46 PM
Surr: Toluene-d8	97.0	0	81-120	%REC		10	05/16/19 03:46 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.652	0.652	0.652	N	mg/Kg-dry	1	05/09/19 08:16 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/16/19 10:00 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.76	0	0		pH Units@21.4°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	23.4	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0491	0.0491	0.0981	N	mg/Kg	1	05/09/19 05:16 PM
Reactive Sulfide	<19.6	19.6	19.6	N	mg/Kg	1	05/09/19 04:26 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-9
Project: Boundary Ventures **Lab ID:** 1905098-09
Project No: 96187101 **Collection Date:** 05/08/19 11:30 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/17/19 03:39 PM
TCLP METALS							
Antimony	<0.00400	0.00400	0.0125		mg/L	1	05/16/19 11:43 AM
Arsenic	0.0103	0.0100	0.0250	J	mg/L	1	05/16/19 11:43 AM
Barium	0.600	0.0150	0.0500		mg/L	1	05/16/19 11:43 AM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:43 AM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:43 AM
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/16/19 11:43 AM
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:43 AM
Nickel	<0.0150	0.0150	0.0500		mg/L	1	05/16/19 11:43 AM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/16/19 11:43 AM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/16/19 11:43 AM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
2,4,5-Trichlorophenol	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
2,4,6-Trichlorophenol	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
2,4-Dinitrotoluene	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
2-Methylphenol	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
3&4-Methylphenol	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
Hexachlorobenzene	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
Hexachlorobutadiene	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
Hexachloroethane	<0.00891	0.00891	0.0357		mg/L	1	05/16/19 02:03 PM
Nitrobenzene	<0.0178	0.0178	0.0357		mg/L	1	05/16/19 02:03 PM
Pentachlorophenol	<0.0178	0.0178	0.0357		mg/L	1	05/16/19 02:03 PM
Pyridine	<0.0357	0.0357	0.0891		mg/L	1	05/16/19 02:03 PM
Surr: 2,4,6-Tribromophenol	94.8	0	42-124		%REC	1	05/16/19 02:03 PM
Surr: 2-Fluorobiphenyl	74.5	0	48-120		%REC	1	05/16/19 02:03 PM
Surr: 2-Fluorophenol	72.8	0	20-120		%REC	1	05/16/19 02:03 PM
Surr: 4-Terphenyl-d14	83.5	0	51-135		%REC	1	05/16/19 02:03 PM
Surr: Nitrobenzene-d5	86.0	0	41-120		%REC	1	05/16/19 02:03 PM
Surr: Phenol-d5	75.8	0	20-120		%REC	1	05/16/19 02:03 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/16/19 04:10 PM
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-9
Project: Boundary Ventures **Lab ID:** 1905098-09
Project No: 96187101 **Collection Date:** 05/08/19 11:30 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/16/19 04:10 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:10 PM
Surr: 1,2-Dichloroethane-d4	108	0	72-119	%REC		10	05/16/19 04:10 PM
Surr: 4-Bromofluorobenzene	98.7	0	76-119	%REC		10	05/16/19 04:10 PM
Surr: Dibromofluoromethane	101	0	85-115	%REC		10	05/16/19 04:10 PM
Surr: Toluene-d8	98.3	0	81-120	%REC		10	05/16/19 04:10 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.687	0.687	0.687	N	mg/Kg-dry	1	05/09/19 08:21 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/16/19 10:00 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.89	0	0		pH Units@21.3°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	27.2	0	0		WT%	1	05/10/19 08:32 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0494	0.0494	0.0987	N	mg/Kg	1	05/09/19 05:16 PM
Reactive Sulfide	19.7	19.7	19.7	N	mg/Kg	1	05/09/19 04:34 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-10
Project:	Boundary Ventures	Lab ID:	1905098-10
Project No:	96187101	Collection Date:	05/08/19 11:40 AM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID							
Aluminum	13000	295	885		mg/Kg-dry	100	05/14/19 01:54 PM
Antimony	1.60	0.590	1.18		mg/Kg-dry	5	05/14/19 11:29 AM
Arsenic	18.7	0.590	1.18		mg/Kg-dry	5	05/14/19 11:29 AM
Barium	5030	11.8	47.2		mg/Kg-dry	100	05/14/19 01:54 PM
Beryllium	0.466	0.118	0.354		mg/Kg-dry	5	05/14/19 11:29 AM
Cadmium	0.522	0.118	0.354		mg/Kg-dry	5	05/14/19 11:29 AM
Calcium	70400	295	885		mg/Kg-dry	100	05/14/19 01:54 PM
Chromium	30.2	0.590	2.36		mg/Kg-dry	5	05/14/19 11:29 AM
Cobalt	5.18	0.590	2.36		mg/Kg-dry	5	05/14/19 11:29 AM
Copper	47.2	0.590	2.36		mg/Kg-dry	5	05/14/19 11:29 AM
Iron	15700	295	885		mg/Kg-dry	100	05/14/19 01:54 PM
Lead	55.8	0.118	0.354		mg/Kg-dry	5	05/14/19 11:29 AM
Lithium	12.1	0.590	2.36		mg/Kg-dry	5	05/14/19 11:29 AM
Magnesium	3190	14.8	44.3		mg/Kg-dry	5	05/14/19 11:29 AM
Manganese	235	0.590	2.36		mg/Kg-dry	5	05/14/19 11:29 AM
Molybdenum	6.90	0.590	2.36		mg/Kg-dry	5	05/14/19 11:29 AM
Nickel	18.7	0.590	2.36		mg/Kg-dry	5	05/14/19 11:29 AM
Potassium	2560	14.8	44.3		mg/Kg-dry	5	05/14/19 11:29 AM
Selenium	3.51	0.177	0.590		mg/Kg-dry	5	05/14/19 11:29 AM
Silver	0.176	0.118	0.236	J	mg/Kg-dry	5	05/14/19 11:29 AM
Sodium	2160	14.8	44.3		mg/Kg-dry	5	05/14/19 11:29 AM
Thallium	<0.590	0.590	1.18		mg/Kg-dry	5	05/14/19 11:29 AM
Vanadium	56.5	1.18	2.95		mg/Kg-dry	5	05/14/19 11:29 AM
Zinc	117	1.18	2.95		mg/Kg-dry	5	05/14/19 11:29 AM
TOTAL MERCURY: SOIL/SOLID							
Mercury	0.487	0.0210	0.0524		mg/Kg-dry	1	05/13/19 01:42 PM
SEMIVOLATILES BY GC/MS							
1,2,4-Trichlorobenzene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
1,2-Dichlorobenzene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
1,3-Dichlorobenzene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
1,4-Dichlorobenzene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
2,4,5-Trichlorophenol	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
2,4,6-Trichlorophenol	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
2,4-Dichlorophenol	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
2,4-Dimethylphenol	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
2,4-Dinitrophenol	<6.34	6.34	16.7		mg/Kg-dry	100	05/14/19 12:45 PM
2,4-Dinitrotoluene	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 DF Dilution Factor
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
 E TPH pattern not Gas or Diesel Range Pattern
 MDL Method Detection Limit
 RL Reporting Limit
 N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-10
Project: Boundary Ventures **Lab ID:** 1905098-10
Project No: 96187101 **Collection Date:** 05/08/19 11:40 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS							
		SW8270D					Analyst: LG
2,6-Dichlorophenol	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
2,6-Dinitrotoluene	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
2-Chloronaphthalene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
2-Chlorophenol	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
2-Methylnaphthalene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
2-Methylphenol	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
2-Nitroaniline	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
2-Nitrophenol	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
3,3'-Dichlorobenzidine	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
3-Nitroaniline	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
4,6-Dinitro-2-methylphenol	<3.80	3.80	8.37		mg/Kg-dry	100	05/14/19 12:45 PM
4-Bromophenyl phenyl ether	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
4-Chloro-3-methylphenol	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
4-Chloroaniline	<0.0380	0.0380	0.0837		mg/Kg-dry	1	05/10/19 03:07 PM
4-Chlorophenyl phenyl ether	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
4-Methylphenol	<0.0254	0.0254	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
4-Nitroaniline	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
4-Nitrophenol	<6.34	6.34	16.7		mg/Kg-dry	100	05/14/19 12:45 PM
Acenaphthene	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Acenaphthylene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Aniline	<0.0837	0.0837	0.167		mg/Kg-dry	1	05/10/19 03:07 PM
Anthracene	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Benzo[a]anthracene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Benzo[a]pyrene	0.0955	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Benzo[b]fluoranthene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Benzo[g,h,i]perylene	0.0905	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Benzo[k]fluoranthene	0.156	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Benzyl alcohol	<0.0380	0.0380	0.0837		mg/Kg-dry	1	05/10/19 03:07 PM
Bis(2-chloroethoxy)methane	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Bis(2-chloroethyl)ether	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Bis(2-chloroisopropyl)ether	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Bis(2-ethylhexyl)phthalate	0.245	0.0380	0.0837		mg/Kg-dry	1	05/10/19 03:07 PM
Butyl benzyl phthalate	<0.0507	0.0507	0.0837		mg/Kg-dry	1	05/10/19 03:07 PM
Carbazole	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Chrysene	0.660	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Dibenz[a,h]anthracene	0.0262	0.0127	0.0337	J	mg/Kg-dry	1	05/10/19 03:07 PM
Dibenzofuran	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Diethyl phthalate	<5.07	5.07	8.37		mg/Kg-dry	100	05/14/19 12:45 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-10
Project: Boundary Ventures **Lab ID:** 1905098-10
Project No: 96187101 **Collection Date:** 05/08/19 11:40 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS							
		SW8270D					Analyst: LG
Dimethyl phthalate	<5.07	5.07	8.37		mg/Kg-dry	100	05/14/19 12:45 PM
Di-n-butyl phthalate	<0.0507	0.0507	0.0837		mg/Kg-dry	1	05/10/19 03:07 PM
Di-n-octyl phthalate	<0.0507	0.0507	0.0837		mg/Kg-dry	1	05/10/19 03:07 PM
Fluoranthene	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Fluorene	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Hexachlorobenzene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Hexachlorobutadiene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Hexachlorocyclopentadiene	<3.80	3.80	8.37		mg/Kg-dry	100	05/14/19 12:45 PM
Hexachloroethane	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Indeno[1,2,3-cd]pyrene	0.0406	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Isophorone	<0.0380	0.0380	0.0837		mg/Kg-dry	1	05/10/19 03:07 PM
Naphthalene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Nitrobenzene	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
N-Nitrosodiethylamine	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
N-Nitrosodi-n-propylamine	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
N-Nitrosodiphenylamine	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Pentachlorophenol	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Phenanthrene	<1.27	1.27	3.37		mg/Kg-dry	100	05/14/19 12:45 PM
Phenol	<0.0127	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Pyrene	0.267	0.0127	0.0337		mg/Kg-dry	1	05/10/19 03:07 PM
Pyridine	<0.0634	0.0634	0.167		mg/Kg-dry	1	05/10/19 03:07 PM
Surr: 2,4,6-Tribromophenol	500	0	45-126	s	%REC	100	05/14/19 12:45 PM
Surr: 2,4,6-Tribromophenol	10.0	0	45-126	s	%REC	1	05/10/19 03:07 PM
Surr: 2-Fluorobiphenyl	100	0	60-125		%REC	100	05/14/19 12:45 PM
Surr: 2-Fluorobiphenyl	52.0	0	60-125	s	%REC	1	05/10/19 03:07 PM
Surr: 2-Fluorophenol	51.0	0	37-125		%REC	1	05/10/19 03:07 PM
Surr: 2-Fluorophenol	0	0	37-125	s	%REC	100	05/14/19 12:45 PM
Surr: 4-Terphenyl-d14	7.00	0	45-125	s	%REC	1	05/10/19 03:07 PM
Surr: 4-Terphenyl-d14	100	0	45-125		%REC	100	05/14/19 12:45 PM
Surr: Nitrobenzene-d5	56.0	0	45-125		%REC	1	05/10/19 03:07 PM
Surr: Nitrobenzene-d5	0	0	45-125	s	%REC	100	05/14/19 12:45 PM
Surr: Phenol-d5	25.0	0	40-125	s	%REC	1	05/10/19 03:07 PM
Surr: Phenol-d5	200	0	40-125	s	%REC	100	05/14/19 12:45 PM
8260 SOIL VOLATILES BY GC/MS							
		SW8260C					Analyst: DEW
1,1,1,2-Tetrachloroethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,1,1-Trichloroethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,1,2,2-Tetrachloroethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,1,2-Trichloroethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-10
Project: Boundary Ventures **Lab ID:** 1905098-10
Project No: 96187101 **Collection Date:** 05/08/19 11:40 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 SOIL VOLATILES BY GC/MS							
				SW8260C			Analyst: DEW
1,1-Dichloroethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,1-Dichloroethene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,1-Dichloropropene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2,3-Trichlorobenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2,3-Trichloropropane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2,4-Trichlorobenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2,4-Trimethylbenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2-Dibromo-3-chloropropane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2-Dibromoethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2-Dichlorobenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2-Dichloroethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,2-Dichloropropane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,3,5-Trimethylbenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,3-Dichlorobenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,3-Dichloropropane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
1,4-Dichlorobenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
2,2-Dichloropropane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
2-Butanone	<0.00600	0.00600	0.0180		mg/Kg-dry	1	05/14/19 12:24 PM
2-Chlorotoluene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
2-Hexanone	<0.00600	0.00600	0.0180		mg/Kg-dry	1	05/14/19 12:24 PM
4-Chlorotoluene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
4-Methyl-2-pentanone	<0.00600	0.00600	0.0180		mg/Kg-dry	1	05/14/19 12:24 PM
Acetone	0.0565	0.0180	0.0600	J	mg/Kg-dry	1	05/14/19 12:24 PM
Benzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Bromobenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Bromochloromethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Bromodichloromethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Bromoform	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Bromomethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Carbon disulfide	<0.00600	0.00600	0.0180		mg/Kg-dry	1	05/14/19 12:24 PM
Carbon tetrachloride	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Chlorobenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Chloroethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Chloroform	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Chloromethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
cis-1,2-Dichloroethene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
cis-1,3-Dichloropropene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Dibromochloromethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

DF Dilution Factor

J Analyte detected between MDL and RL

ND Not Detected at the Method Detection Limit

S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative

E TPH pattern not Gas or Diesel Range Pattern

MDL Method Detection Limit

RL Reporting Limit

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-10
Project:	Boundary Ventures	Lab ID:	1905098-10
Project No:	96187101	Collection Date:	05/08/19 11:40 AM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 SOIL VOLATILES BY GC/MS							
				SW8260C			Analyst: DEW
Dibromomethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Dichlorodifluoromethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Ethylbenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Hexachlorobutadiene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Iodomethane	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Isopropylbenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
m,p-Xylene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Methyl tert-butyl ether	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Methylene chloride	<0.00600	0.00600	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Naphthalene	<0.00600	0.00600	0.0180		mg/Kg-dry	1	05/14/19 12:24 PM
n-Butylbenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
n-Propylbenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
o-Xylene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
p-Isopropyltoluene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
sec-Butylbenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Styrene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
tert-Butylbenzene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Tetrachloroethene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Toluene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
trans-1,2-Dichloroethene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
trans-1,3-Dichloropropene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Trichloroethene	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Trichlorofluoromethane	<0.00600	0.00600	0.0180		mg/Kg-dry	1	05/14/19 12:24 PM
Vinyl chloride	<0.00120	0.00120	0.00600		mg/Kg-dry	1	05/14/19 12:24 PM
Surr: 1,2-Dichloroethane-d4	99.2	0	52-149	%REC		1	05/14/19 12:24 PM
Surr: 4-Bromofluorobenzene	115	0	84-118	%REC		1	05/14/19 12:24 PM
Surr: Dibromofluoromethane	103	0	65-135	%REC		1	05/14/19 12:24 PM
Surr: Toluene-d8	92.7	0	84-116	%REC		1	05/14/19 12:24 PM
PERCENT MOISTURE							
Percent Moisture		D2216					Analyst: RBW
	23.7	0	0	WT%		1	05/10/19 08:32 AM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	C	Sample Result or QC discussed in the Case Narrative
DF	Dilution Factor		E	TPH pattern not Gas or Diesel Range Pattern
J	Analyte detected between MDL and RL		MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit		RL	Reporting Limit
S	Spike Recovery outside control limits		N	Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-11
Project: Boundary Ventures **Lab ID:** 1905098-11
Project No: 96187101 **Collection Date:** 05/08/19 11:20 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/17/19 03:41 PM
TCLP METALS							
Antimony	0.00729	0.00400	0.0125	J	mg/L	1	05/16/19 11:45 AM
Arsenic	<0.0100	0.0100	0.0250		mg/L	1	05/16/19 11:45 AM
Barium	0.244	0.0150	0.0500		mg/L	1	05/16/19 11:45 AM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:45 AM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:45 AM
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/16/19 11:45 AM
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:45 AM
Nickel	<0.0150	0.0150	0.0500		mg/L	1	05/16/19 11:45 AM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/16/19 11:45 AM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/16/19 11:45 AM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
2,4,5-Trichlorophenol	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
2,4,6-Trichlorophenol	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
2,4-Dinitrotoluene	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
2-Methylphenol	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
3&4-Methylphenol	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
Hexachlorobenzene	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
Hexachlorobutadiene	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
Hexachloroethane	<0.00990	0.00990	0.0396		mg/L	1	05/16/19 02:26 PM
Nitrobenzene	<0.0198	0.0198	0.0396		mg/L	1	05/16/19 02:26 PM
Pentachlorophenol	<0.0198	0.0198	0.0396		mg/L	1	05/16/19 02:26 PM
Pyridine	<0.0396	0.0396	0.0990		mg/L	1	05/16/19 02:26 PM
Surr: 2,4,6-Tribromophenol	104	0	42-124		%REC	1	05/16/19 02:26 PM
Surr: 2-Fluorobiphenyl	77.5	0	48-120		%REC	1	05/16/19 02:26 PM
Surr: 2-Fluorophenol	75.0	0	20-120		%REC	1	05/16/19 02:26 PM
Surr: 4-Terphenyl-d14	85.5	0	51-135		%REC	1	05/16/19 02:26 PM
Surr: Nitrobenzene-d5	89.5	0	41-120		%REC	1	05/16/19 02:26 PM
Surr: Phenol-d5	78.8	0	20-120		%REC	1	05/16/19 02:26 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/16/19 04:34 PM
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-11
Project: Boundary Ventures **Lab ID:** 1905098-11
Project No: 96187101 **Collection Date:** 05/08/19 11:20 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/16/19 04:34 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:34 PM
Surr: 1,2-Dichloroethane-d4	109	0	72-119	%REC		10	05/16/19 04:34 PM
Surr: 4-Bromofluorobenzene	101	0	76-119	%REC		10	05/16/19 04:34 PM
Surr: Dibromofluoromethane	103	0	85-115	%REC		10	05/16/19 04:34 PM
Surr: Toluene-d8	97.5	0	81-120	%REC		10	05/16/19 04:34 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.660	0.660	0.660	N	mg/Kg-dry	1	05/10/19 11:56 AM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/16/19 10:00 AM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.59	0	0		pH Units@21.3°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	24.3	0	0		WT%	1	05/15/19 08:33 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0485	0.0485	0.0970	N	mg/Kg	1	05/09/19 05:17 PM
Reactive Sulfide	19.4	19.4	19.4	N	mg/Kg	1	05/09/19 04:38 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID: WC-12						
Project:	Boundary Ventures	Lab ID: 1905098-12						
Project No:	96187101	Collection Date: 05/08/19 12:24 PM						
Lab Order:	1905098	Matrix: SOIL						
Analyses		Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY			SW1311/7470A				Analyst: BM	
Mercury	<0.000400	0.000400	0.00100			mg/L	1	05/17/19 03:44 PM
TCLP METALS			SW1311/6020A				Analyst: SP	
Antimony	0.00460	0.00400	0.0125	J		mg/L	1	05/16/19 11:47 AM
Arsenic	<0.0100	0.0100	0.0250			mg/L	1	05/16/19 11:47 AM
Barium	0.461	0.0150	0.0500			mg/L	1	05/16/19 11:47 AM
Beryllium	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:47 AM
Cadmium	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:47 AM
Chromium	<0.0100	0.0100	0.0250			mg/L	1	05/16/19 11:47 AM
Lead	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:47 AM
Nickel	0.0253	0.0150	0.0500	J		mg/L	1	05/16/19 11:47 AM
Selenium	<0.0100	0.0100	0.0250			mg/L	1	05/16/19 11:47 AM
Silver	<0.00500	0.00500	0.0100			mg/L	1	05/16/19 11:47 AM
TCLP SEMI-VOLATILES			SW1311/8270D				Analyst: LG	
1,4-Dichlorobenzene	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
2,4,5-Trichlorophenol	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
2,4,6-Trichlorophenol	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
2,4-Dinitrotoluene	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
2-Methylphenol	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
3&4-Methylphenol	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
Hexachlorobenzene	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
Hexachlorobutadiene	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
Hexachloroethane	<0.00963	0.00963	0.0385			mg/L	1	05/16/19 02:48 PM
Nitrobenzene	<0.0193	0.0193	0.0385			mg/L	1	05/16/19 02:48 PM
Pentachlorophenol	<0.0193	0.0193	0.0385			mg/L	1	05/16/19 02:48 PM
Pyridine	<0.0385	0.0385	0.0963			mg/L	1	05/16/19 02:48 PM
Surr: 2,4,6-Tribromophenol	96.3	0	42-124			%REC	1	05/16/19 02:48 PM
Surr: 2-Fluorobiphenyl	73.8	0	48-120			%REC	1	05/16/19 02:48 PM
Surr: 2-Fluorophenol	73.2	0	20-120			%REC	1	05/16/19 02:48 PM
Surr: 4-Terphenyl-d14	82.0	0	51-135			%REC	1	05/16/19 02:48 PM
Surr: Nitrobenzene-d5	86.5	0	41-120			%REC	1	05/16/19 02:48 PM
Surr: Phenol-d5	75.8	0	20-120			%REC	1	05/16/19 02:48 PM
TCLP VOLATILES			SW1311/8260C				Analyst: DEW	
1,1-Dichloroethene	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 04:58 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 04:58 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 04:58 PM
2-Butanone	<0.0500	0.0500	0.150			mg/L	10	05/16/19 04:58 PM
Benzene	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 04:58 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-12
Project: Boundary Ventures **Lab ID:** 1905098-12
Project No: 96187101 **Collection Date:** 05/08/19 12:24 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:58 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:58 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/16/19 04:58 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:58 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:58 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 04:58 PM
Surr: 1,2-Dichloroethane-d4	109	0	72-119	%REC		10	05/16/19 04:58 PM
Surr: 4-Bromofluorobenzene	98.8	0	76-119	%REC		10	05/16/19 04:58 PM
Surr: Dibromofluoromethane	102	0	85-115	%REC		10	05/16/19 04:58 PM
Surr: Toluene-d8	96.8	0	81-120	%REC		10	05/16/19 04:58 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.680	0.680	0.680	N	mg/Kg-dry	1	05/10/19 01:13 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/17/19 12:15 PM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	7.31	0	0		pH Units@21.1°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	26.4	0	0		WT%	1	05/15/19 08:33 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0490	0.0490	0.0979	N	mg/Kg	1	05/09/19 05:17 PM
Reactive Sulfide	<19.6	19.6	19.6	N	mg/Kg	1	05/09/19 04:54 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID: WC-13						
Project:	Boundary Ventures	Lab ID: 1905098-13						
Project No:	96187101	Collection Date: 05/08/19 12:50 PM						
Lab Order:	1905098	Matrix: SOIL						
Analyses		Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY			SW1311/7470A				Analyst: BM	
Mercury	<0.000400	0.000400	0.00100			mg/L	1	05/17/19 03:46 PM
TCLP METALS			SW1311/6020A				Analyst: SP	
Antimony	0.0110	0.00400	0.0125	J		mg/L	1	05/16/19 11:49 AM
Arsenic	<0.0100	0.0100	0.0250			mg/L	1	05/16/19 11:49 AM
Barium	0.232	0.0150	0.0500			mg/L	1	05/16/19 11:49 AM
Beryllium	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:49 AM
Cadmium	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:49 AM
Chromium	0.0220	0.0100	0.0250	J		mg/L	1	05/16/19 11:49 AM
Lead	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:49 AM
Nickel	0.0436	0.0150	0.0500	J		mg/L	1	05/16/19 11:49 AM
Selenium	<0.0100	0.0100	0.0250			mg/L	1	05/16/19 11:49 AM
Silver	<0.00500	0.00500	0.0100			mg/L	1	05/16/19 11:49 AM
TCLP SEMI-VOLATILES			SW1311/8270D				Analyst: LG	
1,4-Dichlorobenzene	<0.00899	0.00899	0.0360			mg/L	1	05/16/19 03:11 PM
2,4,5-Trichlorophenol	<0.00899	0.00899	0.0360			mg/L	1	05/16/19 03:11 PM
2,4,6-Trichlorophenol	<0.00899	0.00899	0.0360			mg/L	1	05/16/19 03:11 PM
2,4-Dinitrotoluene	<0.00899	0.00899	0.0360			mg/L	1	05/16/19 03:11 PM
2-Methylphenol	<0.00899	0.00899	0.0360			mg/L	1	05/16/19 03:11 PM
3&4-Methylphenol	0.0183	0.00899	0.0360	J		mg/L	1	05/16/19 03:11 PM
Hexachlorobenzene	<0.00899	0.00899	0.0360			mg/L	1	05/16/19 03:11 PM
Hexachlorobutadiene	<0.00899	0.00899	0.0360			mg/L	1	05/16/19 03:11 PM
Hexachloroethane	<0.00899	0.00899	0.0360			mg/L	1	05/16/19 03:11 PM
Nitrobenzene	<0.0180	0.0180	0.0360			mg/L	1	05/16/19 03:11 PM
Pentachlorophenol	<0.0180	0.0180	0.0360			mg/L	1	05/16/19 03:11 PM
Pyridine	<0.0360	0.0360	0.0899			mg/L	1	05/16/19 03:11 PM
Surr: 2,4,6-Tribromophenol	93.8	0	42-124			%REC	1	05/16/19 03:11 PM
Surr: 2-Fluorobiphenyl	75.0	0	48-120			%REC	1	05/16/19 03:11 PM
Surr: 2-Fluorophenol	66.2	0	20-120			%REC	1	05/16/19 03:11 PM
Surr: 4-Terphenyl-d14	86.5	0	51-135			%REC	1	05/16/19 03:11 PM
Surr: Nitrobenzene-d5	87.5	0	41-120			%REC	1	05/16/19 03:11 PM
Surr: Phenol-d5	74.5	0	20-120			%REC	1	05/16/19 03:11 PM
TCLP VOLATILES			SW1311/8260C				Analyst: DEW	
1,1-Dichloroethene	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 05:22 PM
1,2-Dichloroethane	0.00640	0.00300	0.0100	J		mg/L	10	05/16/19 05:22 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 05:22 PM
2-Butanone	<0.0500	0.0500	0.150			mg/L	10	05/16/19 05:22 PM
Benzene	0.246	0.00300	0.0100			mg/L	10	05/16/19 05:22 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-13
Project: Boundary Ventures **Lab ID:** 1905098-13
Project No: 96187101 **Collection Date:** 05/08/19 12:50 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:22 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:22 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/16/19 05:22 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:22 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:22 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:22 PM
Surr: 1,2-Dichloroethane-d4	107	0	72-119	%REC		10	05/16/19 05:22 PM
Surr: 4-Bromofluorobenzene	101	0	76-119	%REC		10	05/16/19 05:22 PM
Surr: Dibromofluoromethane	101	0	85-115	%REC		10	05/16/19 05:22 PM
Surr: Toluene-d8	100	0	81-120	%REC		10	05/16/19 05:22 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	4.05	0.742	0.742	N	mg/Kg-dry	1	05/10/19 01:25 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/17/19 12:15 PM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	11.54	0	0		pH Units@21.1°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	32.6	0	0		WT%	1	05/15/19 08:33 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0495	0.0495	0.0990	N	mg/Kg	1	05/09/19 05:17 PM
Reactive Sulfide	<19.8	19.8	19.8	N	mg/Kg	1	05/09/19 04:58 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-14
Project:	Boundary Ventures	Lab ID:	1905098-14
Project No:	96187101	Collection Date:	05/08/19 11:44 AM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY							
Mercury	<0.000400	0.000400	0.00100		mg/L	1	05/17/19 03:48 PM
TCLP METALS							
Antimony	0.00854	0.00400	0.0125	J	mg/L	1	05/16/19 11:51 AM
Arsenic	<0.0100	0.0100	0.0250		mg/L	1	05/16/19 11:51 AM
Barium	0.432	0.0150	0.0500		mg/L	1	05/16/19 11:51 AM
Beryllium	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:51 AM
Cadmium	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:51 AM
Chromium	<0.0100	0.0100	0.0250		mg/L	1	05/16/19 11:51 AM
Lead	<0.00150	0.00150	0.00500		mg/L	1	05/16/19 11:51 AM
Nickel	<0.0150	0.0150	0.0500		mg/L	1	05/16/19 11:51 AM
Selenium	<0.0100	0.0100	0.0250		mg/L	1	05/16/19 11:51 AM
Silver	<0.00500	0.00500	0.0100		mg/L	1	05/16/19 11:51 AM
TCLP SEMI-VOLATILES							
1,4-Dichlorobenzene	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
2,4,5-Trichlorophenol	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
2,4,6-Trichlorophenol	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
2,4-Dinitrotoluene	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
2-Methylphenol	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
3&4-Methylphenol	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
Hexachlorobenzene	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
Hexachlorobutadiene	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
Hexachloroethane	<0.00954	0.00954	0.0382		mg/L	1	05/16/19 03:33 PM
Nitrobenzene	<0.0191	0.0191	0.0382		mg/L	1	05/16/19 03:33 PM
Pentachlorophenol	<0.0191	0.0191	0.0382		mg/L	1	05/16/19 03:33 PM
Pyridine	<0.0382	0.0382	0.0954		mg/L	1	05/16/19 03:33 PM
Surr: 2,4,6-Tribromophenol	100	0	42-124		%REC	1	05/16/19 03:33 PM
Surr: 2-Fluorobiphenyl	74.5	0	48-120		%REC	1	05/16/19 03:33 PM
Surr: 2-Fluorophenol	74.8	0	20-120		%REC	1	05/16/19 03:33 PM
Surr: 4-Terphenyl-d14	83.2	0	51-135		%REC	1	05/16/19 03:33 PM
Surr: Nitrobenzene-d5	87.2	0	41-120		%REC	1	05/16/19 03:33 PM
Surr: Phenol-d5	79.0	0	20-120		%REC	1	05/16/19 03:33 PM
TCLP VOLATILES							
1,1-Dichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM
2-Butanone	<0.0500	0.0500	0.150		mg/L	10	05/16/19 05:46 PM
Benzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-14
Project: Boundary Ventures **Lab ID:** 1905098-14
Project No: 96187101 **Collection Date:** 05/08/19 11:44 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/16/19 05:46 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 05:46 PM
Surr: 1,2-Dichloroethane-d4	107	0	72-119	%REC		10	05/16/19 05:46 PM
Surr: 4-Bromofluorobenzene	98.1	0	76-119	%REC		10	05/16/19 05:46 PM
Surr: Dibromofluoromethane	102	0	85-115	%REC		10	05/16/19 05:46 PM
Surr: Toluene-d8	97.5	0	81-120	%REC		10	05/16/19 05:46 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.649	0.649	0.649	N	mg/Kg-dry	1	05/10/19 01:17 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/17/19 12:15 PM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	8.17	0	0		pH Units@21.3°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	23.0	0	0		WT%	1	05/15/19 08:33 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0493	0.0493	0.0986	N	mg/Kg	1	05/09/19 05:18 PM
Reactive Sulfide	<19.7	19.7	19.7	N	mg/Kg	1	05/09/19 05:02 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-16
Project: Boundary Ventures **Lab ID:** 1905098-15
Project No: 96187101 **Collection Date:** 05/08/19 11:51 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID							
Aluminum	16500	350	1050		mg/Kg-dry	100	05/14/19 01:56 PM
Antimony	1.70	0.701	1.40		mg/Kg-dry	5	05/14/19 11:30 AM
Arsenic	16.0	0.701	1.40		mg/Kg-dry	5	05/14/19 11:30 AM
Barium	6060	14.0	56.1		mg/Kg-dry	100	05/14/19 01:56 PM
Beryllium	0.676	0.140	0.421	J	mg/Kg-dry	5	05/14/19 11:30 AM
Cadmium	0.411	0.140	0.421	J	mg/Kg-dry	5	05/14/19 11:30 AM
Calcium	74200	350	1050		mg/Kg-dry	100	05/14/19 01:56 PM
Chromium	29.8	0.701	2.80		mg/Kg-dry	5	05/14/19 11:30 AM
Cobalt	5.43	0.701	2.80		mg/Kg-dry	5	05/14/19 11:30 AM
Copper	48.3	0.701	2.80		mg/Kg-dry	5	05/14/19 11:30 AM
Iron	17500	350	1050		mg/Kg-dry	100	05/14/19 01:56 PM
Lead	51.9	0.140	0.421		mg/Kg-dry	5	05/14/19 11:30 AM
Lithium	14.4	0.701	2.80		mg/Kg-dry	5	05/14/19 11:30 AM
Magnesium	4350	17.5	52.6		mg/Kg-dry	5	05/14/19 11:30 AM
Manganese	272	0.701	2.80		mg/Kg-dry	5	05/14/19 11:30 AM
Molybdenum	6.94	0.701	2.80		mg/Kg-dry	5	05/14/19 11:30 AM
Nickel	19.1	0.701	2.80		mg/Kg-dry	5	05/14/19 11:30 AM
Potassium	3450	17.5	52.6		mg/Kg-dry	5	05/14/19 11:30 AM
Selenium	3.97	0.210	0.701	J	mg/Kg-dry	5	05/14/19 11:30 AM
Silver	0.199	0.140	0.280	J	mg/Kg-dry	5	05/14/19 11:30 AM
Sodium	2800	17.5	52.6		mg/Kg-dry	5	05/14/19 11:30 AM
Thallium	<0.701	0.701	1.40		mg/Kg-dry	5	05/14/19 11:30 AM
Vanadium	49.9	1.40	3.50		mg/Kg-dry	5	05/14/19 11:30 AM
Zinc	127	1.40	3.50		mg/Kg-dry	5	05/14/19 11:30 AM
TOTAL MERCURY: SOIL/SOLID							
Mercury	0.547	0.0231	0.0578		mg/Kg-dry	1	05/13/19 01:44 PM
SEMIVOLATILES BY GC/MS							
1,2,4-Trichlorobenzene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
1,2-Dichlorobenzene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
1,3-Dichlorobenzene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
1,4-Dichlorobenzene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
2,4,5-Trichlorophenol	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
2,4,6-Trichlorophenol	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
2,4-Dichlorophenol	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
2,4-Dimethylphenol	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
2,4-Dinitrophenol	<7.12	7.12	18.8		mg/Kg-dry	100	05/14/19 01:07 PM
2,4-Dinitrotoluene	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-16
Project: Boundary Ventures **Lab ID:** 1905098-15
Project No: 96187101 **Collection Date:** 05/08/19 11:51 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS							
		SW8270D					Analyst: LG
2,6-Dichlorophenol	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
2,6-Dinitrotoluene	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
2-Chloronaphthalene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
2-Chlorophenol	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
2-Methylnaphthalene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
2-Methylphenol	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
2-Nitroaniline	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
2-Nitrophenol	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
3,3'-Dichlorobenzidine	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
3-Nitroaniline	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
4,6-Dinitro-2-methylphenol	<4.27	4.27	9.39		mg/Kg-dry	100	05/14/19 01:07 PM
4-Bromophenyl phenyl ether	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
4-Chloro-3-methylphenol	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
4-Chloroaniline	<0.0427	0.0427	0.0939		mg/Kg-dry	1	05/10/19 03:32 PM
4-Chlorophenyl phenyl ether	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
4-Methylphenol	<0.0285	0.0285	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
4-Nitroaniline	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
4-Nitrophenol	<7.12	7.12	18.8		mg/Kg-dry	100	05/14/19 01:07 PM
Acenaphthene	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
Acenaphthylene	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
Aniline	<0.0939	0.0939	0.188		mg/Kg-dry	1	05/10/19 03:32 PM
Anthracene	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
Benzo[a]anthracene	0.330	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Benzo[a]pyrene	0.237	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Benzo[b]fluoranthene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Benzo[g,h,i]perylene	0.227	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Benzo[k]fluoranthene	0.601	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Benzyl alcohol	<0.0427	0.0427	0.0939		mg/Kg-dry	1	05/10/19 03:32 PM
Bis(2-chloroethoxy)methane	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Bis(2-chloroethyl)ether	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Bis(2-chloroisopropyl)ether	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Bis(2-ethylhexyl)phthalate	16.5	4.27	9.39		mg/Kg-dry	100	05/14/19 01:07 PM
Butyl benzyl phthalate	<0.0569	0.0569	0.0939		mg/Kg-dry	1	05/10/19 03:32 PM
Carbazole	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
Chrysene	0.568	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Dibenz[a,h]anthracene	0.0417	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Dibenzofuran	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
Diethyl phthalate	<5.69	5.69	9.39		mg/Kg-dry	100	05/14/19 01:07 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-16
Project: Boundary Ventures **Lab ID:** 1905098-15
Project No: 96187101 **Collection Date:** 05/08/19 11:51 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS							
			SW8270D				Analyst: LG
Dimethyl phthalate	<5.69	5.69	9.39		mg/Kg-dry	100	05/14/19 01:07 PM
Di-n-butyl phthalate	<5.69	5.69	9.39		mg/Kg-dry	100	05/14/19 01:07 PM
Di-n-octyl phthalate	<0.0569	0.0569	0.0939		mg/Kg-dry	1	05/10/19 03:32 PM
Fluoranthene	1.42	1.42	3.79	J	mg/Kg-dry	100	05/14/19 01:07 PM
Fluorene	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
Hexachlorobenzene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Hexachlorobutadiene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Hexachlorocyclopentadiene	<4.27	4.27	9.39		mg/Kg-dry	100	05/14/19 01:07 PM
Hexachloroethane	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Indeno[1,2,3-cd]pyrene	0.118	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Isophorone	<0.0427	0.0427	0.0939		mg/Kg-dry	1	05/10/19 03:32 PM
Naphthalene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Nitrobenzene	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
N-Nitrosodiethylamine	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
N-Nitrosodi-n-propylamine	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
N-Nitrosodiphenylamine	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
Pentachlorophenol	<1.42	1.42	3.79		mg/Kg-dry	100	05/14/19 01:07 PM
Phenanthrene	2.09	1.42	3.79	J	mg/Kg-dry	100	05/14/19 01:07 PM
Phenol	<0.0142	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Pyrene	1.50	0.0142	0.0379		mg/Kg-dry	1	05/10/19 03:32 PM
Pyridine	<0.0712	0.0712	0.188		mg/Kg-dry	1	05/10/19 03:32 PM
Surr: 2,4,6-Tribromophenol	500	0	45-126	S	%REC	100	05/14/19 01:07 PM
Surr: 2,4,6-Tribromophenol	88.0	0	45-126		%REC	1	05/10/19 03:32 PM
Surr: 2-Fluorobiphenyl	100	0	60-125		%REC	100	05/14/19 01:07 PM
Surr: 2-Fluorobiphenyl	190	0	60-125	S	%REC	1	05/10/19 03:32 PM
Surr: 2-Fluorophenol	0	0	37-125	S	%REC	100	05/14/19 01:07 PM
Surr: 2-Fluorophenol	61.0	0	37-125		%REC	1	05/10/19 03:32 PM
Surr: 4-Terphenyl-d14	100	0	45-125		%REC	100	05/14/19 01:07 PM
Surr: 4-Terphenyl-d14	64.0	0	45-125		%REC	1	05/10/19 03:32 PM
Surr: Nitrobenzene-d5	100	0	45-125		%REC	100	05/14/19 01:07 PM
Surr: Nitrobenzene-d5	79.0	0	45-125		%REC	1	05/10/19 03:32 PM
Surr: Phenol-d5	0	0	40-125	S	%REC	100	05/14/19 01:07 PM
Surr: Phenol-d5	29.0	0	40-125	S	%REC	1	05/10/19 03:32 PM
8260 SOIL VOLATILES BY GC/MS							
			SW8260C				Analyst: DEW
1,1,1,2-Tetrachloroethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,1,1-Trichloroethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,1,2,2-Tetrachloroethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,1,2-Trichloroethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-16
Project:	Boundary Ventures	Lab ID:	1905098-15
Project No:	96187101	Collection Date:	05/08/19 11:51 AM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 SOIL VOLATILES BY GC/MS							
			SW8260C				Analyst: DEW
1,1-Dichloroethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,1-Dichloroethene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,1-Dichloropropene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2,3-Trichlorobenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2,3-Trichloropropane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2,4-Trichlorobenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2,4-Trimethylbenzene	0.230	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2-Dibromo-3-chloropropane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2-Dibromoethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2-Dichlorobenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2-Dichloroethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,2-Dichloropropane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,3,5-Trimethylbenzene	6.27	0.0640	0.320		mg/Kg-dry	50	05/14/19 06:01 PM
1,3-Dichlorobenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,3-Dichloropropane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
1,4-Dichlorobenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
2,2-Dichloropropane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
2-Butanone	<0.00684	0.00684	0.0205		mg/Kg-dry	1	05/14/19 12:52 PM
2-Chlorotoluene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
2-Hexanone	<0.00684	0.00684	0.0205		mg/Kg-dry	1	05/14/19 12:52 PM
4-Chlorotoluene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
4-Methyl-2-pentanone	<0.00684	0.00684	0.0205		mg/Kg-dry	1	05/14/19 12:52 PM
Acetone	0.245	0.0205	0.0684		mg/Kg-dry	1	05/14/19 12:52 PM
Benzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Bromobenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Bromochloromethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Bromodichloromethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Bromoform	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Bromomethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Carbon disulfide	<0.00684	0.00684	0.0205		mg/Kg-dry	1	05/14/19 12:52 PM
Carbon tetrachloride	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Chlorobenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Chloroethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Chloroform	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Chloromethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
cis-1,2-Dichloroethene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
cis-1,3-Dichloropropene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Dibromochloromethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-16
Project: Boundary Ventures **Lab ID:** 1905098-15
Project No: 96187101 **Collection Date:** 05/08/19 11:51 AM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 SOIL VOLATILES BY GC/MS							
Dibromomethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Dichlorodifluoromethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Ethylbenzene	0.108	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Hexachlorobutadiene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Iodomethane	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Isopropylbenzene	0.0228	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
m,p-Xylene	0.164	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Methyl tert-butyl ether	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Methylene chloride	<0.00684	0.00684	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Naphthalene	0.0112	0.00684	0.0205	J	mg/Kg-dry	1	05/14/19 12:52 PM
n-Butylbenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
n-Propylbenzene	0.0567	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
o-Xylene	0.457	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
p-Isopropyltoluene	0.0545	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
sec-Butylbenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Styrene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
tert-Butylbenzene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Tetrachloroethene	0.00477	0.00137	0.00684	J	mg/Kg-dry	1	05/14/19 12:52 PM
Toluene	0.0659	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
trans-1,2-Dichloroethene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
trans-1,3-Dichloropropene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Trichloroethene	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Trichlorofluoromethane	<0.00684	0.00684	0.0205		mg/Kg-dry	1	05/14/19 12:52 PM
Vinyl chloride	<0.00137	0.00137	0.00684		mg/Kg-dry	1	05/14/19 12:52 PM
Surr: 1,2-Dichloroethane-d4	99.6	0	52-149		%REC	1	05/14/19 12:52 PM
Surr: 1,2-Dichloroethane-d4	90.5	0	52-149		%REC	50	05/14/19 06:01 PM
Surr: 4-Bromofluorobenzene	159	0	84-118	S	%REC	1	05/14/19 12:52 PM
Surr: 4-Bromofluorobenzene	97.5	0	84-118		%REC	50	05/14/19 06:01 PM
Surr: Dibromofluoromethane	105	0	65-135		%REC	1	05/14/19 12:52 PM
Surr: Dibromofluoromethane	95.2	0	65-135		%REC	50	05/14/19 06:01 PM
Surr: Toluene-d8	103	0	84-116		%REC	1	05/14/19 12:52 PM
Surr: Toluene-d8	88.3	0	84-116		%REC	50	05/14/19 06:01 PM
PERCENT MOISTURE							
Percent Moisture	30.7			D2216	WT%	1	Analyst: RBW 05/20/19 08:32 AM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-17
Project: Boundary Ventures **Lab ID:** 1905098-16
Project No: 96187101 **Collection Date:** 05/08/19 12:00 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID							
Aluminum	16100	324	973		mg/Kg-dry	100	05/14/19 12:09 PM
Antimony	3.69	0.649	1.30		mg/Kg-dry	5	05/14/19 11:21 AM
Arsenic	11.1	0.649	1.30		mg/Kg-dry	5	05/14/19 11:21 AM
Barium	6330	13.0	51.9		mg/Kg-dry	100	05/14/19 12:09 PM
Beryllium	0.604	0.130	0.389		mg/Kg-dry	5	05/14/19 11:21 AM
Cadmium	0.321	0.130	0.389	J	mg/Kg-dry	5	05/14/19 11:21 AM
Calcium	77800	324	973		mg/Kg-dry	100	05/14/19 12:09 PM
Chromium	36.7	0.649	2.60		mg/Kg-dry	5	05/14/19 11:21 AM
Cobalt	5.49	0.649	2.60		mg/Kg-dry	5	05/14/19 11:21 AM
Copper	47.3	0.649	2.60		mg/Kg-dry	5	05/14/19 11:21 AM
Iron	21400	324	973		mg/Kg-dry	100	05/14/19 12:09 PM
Lead	39.0	0.130	0.389		mg/Kg-dry	5	05/14/19 11:21 AM
Lithium	11.7	0.649	2.60		mg/Kg-dry	5	05/14/19 11:21 AM
Magnesium	3930	16.2	48.7		mg/Kg-dry	5	05/14/19 11:21 AM
Manganese	318	0.649	2.60		mg/Kg-dry	5	05/14/19 11:21 AM
Molybdenum	11.8	0.649	2.60		mg/Kg-dry	5	05/14/19 11:21 AM
Nickel	31.1	0.649	2.60		mg/Kg-dry	5	05/14/19 11:21 AM
Potassium	2470	16.2	48.7		mg/Kg-dry	5	05/14/19 11:21 AM
Selenium	7.43	0.195	0.649		mg/Kg-dry	5	05/14/19 11:21 AM
Silver	0.149	0.130	0.260	J	mg/Kg-dry	5	05/14/19 11:21 AM
Sodium	2170	16.2	48.7		mg/Kg-dry	5	05/14/19 11:21 AM
Thallium	<0.649	0.649	1.30		mg/Kg-dry	5	05/14/19 11:21 AM
Vanadium	61.7	1.30	3.24		mg/Kg-dry	5	05/14/19 11:21 AM
Zinc	142	1.30	3.24		mg/Kg-dry	5	05/14/19 11:21 AM
TOTAL MERCURY: SOIL/SOLID							
Mercury	0.483	0.0216	0.0540		mg/Kg-dry	1	05/13/19 01:46 PM
SEMIVOLATILES BY GC/MS							
1,2,4-Trichlorobenzene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
1,2-Dichlorobenzene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
1,3-Dichlorobenzene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
1,4-Dichlorobenzene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
2,4,5-Trichlorophenol	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
2,4,6-Trichlorophenol	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
2,4-Dichlorophenol	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
2,4-Dimethylphenol	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
2,4-Dinitrophenol	<0.651	0.651	1.72		mg/Kg-dry	10	05/10/19 08:05 PM
2,4-Dinitrotoluene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-17
Project: Boundary Ventures **Lab ID:** 1905098-16
Project No: 96187101 **Collection Date:** 05/08/19 12:00 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS							
		SW8270D					Analyst: LG
2,6-Dichlorophenol	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
2,6-Dinitrotoluene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
2-Chloronaphthalene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
2-Chlorophenol	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
2-Methylnaphthalene	22.1	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
2-Methylphenol	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
2-Nitroaniline	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
2-Nitrophenol	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
3,3'-Dichlorobenzidine	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
3-Nitroaniline	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
4,6-Dinitro-2-methylphenol	<0.390	0.390	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
4-Bromophenyl phenyl ether	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
4-Chloro-3-methylphenol	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
4-Chloroaniline	<0.390	0.390	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
4-Chlorophenyl phenyl ether	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
4-Methylphenol	<0.260	0.260	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
4-Nitroaniline	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
4-Nitrophenol	<0.651	0.651	1.72		mg/Kg-dry	10	05/10/19 08:05 PM
Acenaphthene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Acenaphthylene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Aniline	<0.859	0.859	1.72		mg/Kg-dry	10	05/10/19 08:05 PM
Anthracene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Benzo[a]anthracene	3.82	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Benzo[a]pyrene	4.86	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Benzo[b]fluoranthene	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Benzo[g,h,i]perylene	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Benzo[k]fluoranthene	4.16	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Benzyl alcohol	<0.390	0.390	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
Bis(2-chloroethoxy)methane	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Bis(2-chloroethyl)ether	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Bis(2-chloroisopropyl)ether	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Bis(2-ethylhexyl)phthalate	<0.390	0.390	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
Butyl benzyl phthalate	<0.520	0.520	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
Carbazole	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Chrysene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Dibenz[a,h]anthracene	<1.30	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Dibenzofuran	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Diethyl phthalate	<0.520	0.520	0.859		mg/Kg-dry	10	05/10/19 08:05 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-17
Project:	Boundary Ventures	Lab ID:	1905098-16
Project No:	96187101	Collection Date:	05/08/19 12:00 PM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS							
			SW8270D				Analyst: LG
Dimethyl phthalate	<0.520	0.520	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
Di-n-butyl phthalate	<0.520	0.520	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
Di-n-octyl phthalate	<5.20	5.20	8.59		mg/Kg-dry	100	05/14/19 01:30 PM
Fluoranthene	9.98	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Fluorene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Hexachlorobenzene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Hexachlorobutadiene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Hexachlorocyclopentadiene	<0.390	0.390	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
Hexachloroethane	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Indeno[1,2,3-cd]pyrene	1.91	1.30	3.46	J	mg/Kg-dry	100	05/14/19 01:30 PM
Isophorone	<0.390	0.390	0.859		mg/Kg-dry	10	05/10/19 08:05 PM
Naphthalene	12.4	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Nitrobenzene	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
N-Nitrosodiethylamine	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
N-Nitrosodi-n-propylamine	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
N-Nitrosodiphenylamine	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Pentachlorophenol	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Phenanthrene	11.2	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Phenol	<0.130	0.130	0.346		mg/Kg-dry	10	05/10/19 08:05 PM
Pyrene	14.1	1.30	3.46		mg/Kg-dry	100	05/14/19 01:30 PM
Pyridine	<0.651	0.651	1.72		mg/Kg-dry	10	05/10/19 08:05 PM
Surr: 2,4,6-Tribromophenol	120	0	45-126		%REC	10	05/10/19 08:05 PM
Surr: 2,4,6-Tribromophenol	300	0	45-126	S	%REC	100	05/14/19 01:30 PM
Surr: 2-Fluorobiphenyl	110	0	60-125		%REC	10	05/10/19 08:05 PM
Surr: 2-Fluorobiphenyl	100	0	60-125		%REC	100	05/14/19 01:30 PM
Surr: 2-Fluorophenol	60.0	0	37-125		%REC	10	05/10/19 08:05 PM
Surr: 2-Fluorophenol	0	0	37-125	S	%REC	100	05/14/19 01:30 PM
Surr: 4-Terphenyl-d14	100	0	45-125		%REC	100	05/14/19 01:30 PM
Surr: 4-Terphenyl-d14	200	0	45-125	S	%REC	10	05/10/19 08:05 PM
Surr: Nitrobenzene-d5	0	0	45-125	S	%REC	10	05/10/19 08:05 PM
Surr: Nitrobenzene-d5	200	0	45-125	S	%REC	100	05/14/19 01:30 PM
Surr: Phenol-d5	0	0	40-125	S	%REC	10	05/10/19 08:05 PM
Surr: Phenol-d5	0	0	40-125	S	%REC	100	05/14/19 01:30 PM
8260 SOIL VOLATILES BY GC/MS							
			SW8260C				Analyst: DEW
1,1,1,2-Tetrachloroethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,1,1-Trichloroethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,1,2,2-Tetrachloroethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,1,2-Trichloroethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID:	WC-17
Project:	Boundary Ventures	Lab ID:	1905098-16
Project No:	96187101	Collection Date:	05/08/19 12:00 PM
Lab Order:	1905098	Matrix:	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 SOIL VOLATILES BY GC/MS							
				SW8260C			Analyst: DEW
1,1-Dichloroethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,1-Dichloroethene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,1-Dichloropropene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,2,3-Trichlorobenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,2,3-Trichloropropane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,2,4-Trichlorobenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,2,4-Trimethylbenzene	17.9	0.0625	0.312		mg/Kg-dry	50	05/14/19 06:29 PM
1,2-Dibromo-3-chloropropane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,2-Dibromoethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,2-Dichlorobenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,2-Dichloroethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,2-Dichloropropane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,3,5-Trimethylbenzene	0.346	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,3-Dichlorobenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,3-Dichloropropane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
1,4-Dichlorobenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
2,2-Dichloropropane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
2-Butanone	<0.00671	0.00671	0.0201		mg/Kg-dry	1	05/14/19 01:20 PM
2-Chlorotoluene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
2-Hexanone	<0.00671	0.00671	0.0201		mg/Kg-dry	1	05/14/19 01:20 PM
4-Chlorotoluene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
4-Methyl-2-pentanone	<0.00671	0.00671	0.0201		mg/Kg-dry	1	05/14/19 01:20 PM
Acetone	0.735	0.0201	0.0671		mg/Kg-dry	1	05/14/19 01:20 PM
Benzene	0.0686	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Bromobenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Bromochloromethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Bromodichloromethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Bromoform	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Bromomethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Carbon disulfide	<0.00671	0.00671	0.0201		mg/Kg-dry	1	05/14/19 01:20 PM
Carbon tetrachloride	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Chlorobenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Chloroethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Chloroform	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Chloromethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
cis-1,2-Dichloroethene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
cis-1,3-Dichloropropene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Dibromochloromethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-17
Project: Boundary Ventures **Lab ID:** 1905098-16
Project No: 96187101 **Collection Date:** 05/08/19 12:00 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 SOIL VOLATILES BY GC/MS							
Dibromomethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Dichlorodifluoromethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Ethylbenzene	9.81	0.0625	0.312		mg/Kg-dry	50	05/14/19 06:29 PM
Hexachlorobutadiene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Iodomethane	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Isopropylbenzene	0.0528	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
m,p-Xylene	53.3	0.0625	0.312		mg/Kg-dry	50	05/14/19 06:29 PM
Methyl tert-butyl ether	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Methylene chloride	<0.00671	0.00671	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Naphthalene	0.295	0.00671	0.0201		mg/Kg-dry	1	05/14/19 01:20 PM
n-Butylbenzene	0.0620	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
n-Propylbenzene	0.0937	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
o-Xylene	25.3	0.0625	0.312		mg/Kg-dry	50	05/14/19 06:29 PM
p-Isopropyltoluene	0.0441	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
sec-Butylbenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Styrene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
tert-Butylbenzene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Tetrachloroethene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Toluene	11.5	0.0625	0.312		mg/Kg-dry	50	05/14/19 06:29 PM
trans-1,2-Dichloroethene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
trans-1,3-Dichloropropene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Trichloroethene	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Trichlorofluoromethane	<0.00671	0.00671	0.0201		mg/Kg-dry	1	05/14/19 01:20 PM
Vinyl chloride	<0.00134	0.00134	0.00671		mg/Kg-dry	1	05/14/19 01:20 PM
Surr: 1,2-Dichloroethane-d4	94.1	0	52-149		%REC	1	05/14/19 01:20 PM
Surr: 1,2-Dichloroethane-d4	88.3	0	52-149		%REC	50	05/14/19 06:29 PM
Surr: 4-Bromofluorobenzene	136	0	84-118	S	%REC	1	05/14/19 01:20 PM
Surr: 4-Bromofluorobenzene	102	0	84-118		%REC	50	05/14/19 06:29 PM
Surr: Dibromofluoromethane	90.6	0	65-135		%REC	1	05/14/19 01:20 PM
Surr: Dibromofluoromethane	93.0	0	65-135		%REC	50	05/14/19 06:29 PM
Surr: Toluene-d8	105	0	84-116		%REC	1	05/14/19 01:20 PM
Surr: Toluene-d8	91.2	0	84-116		%REC	50	05/14/19 06:29 PM
PERCENT MOISTURE							
Percent Moisture	25.9	0	0		WT%	1	05/20/19 08:32 AM
Analyst: DEW							

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT:	Terracon	Client Sample ID: WC-18						
Project:	Boundary Ventures	Lab ID: 1905098-17						
Project No:	96187101	Collection Date: 05/08/19 12:11 PM						
Lab Order:	1905098	Matrix: SOIL						
Analyses		Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP MERCURY			SW1311/7470A				Analyst: BM	
Mercury	<0.000400	0.000400	0.00100			mg/L	1	05/17/19 03:50 PM
TCLP METALS			SW1311/6020A				Analyst: SP	
Antimony	0.0109	0.00400	0.0125	J		mg/L	1	05/16/19 11:53 AM
Arsenic	<0.0100	0.0100	0.0250			mg/L	1	05/16/19 11:53 AM
Barium	0.238	0.0150	0.0500			mg/L	1	05/16/19 11:53 AM
Beryllium	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:53 AM
Cadmium	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:53 AM
Chromium	<0.0100	0.0100	0.0250			mg/L	1	05/16/19 11:53 AM
Lead	<0.00150	0.00150	0.00500			mg/L	1	05/16/19 11:53 AM
Nickel	<0.0150	0.0150	0.0500			mg/L	1	05/16/19 11:53 AM
Selenium	<0.0100	0.0100	0.0250			mg/L	1	05/16/19 11:53 AM
Silver	<0.00500	0.00500	0.0100			mg/L	1	05/16/19 11:53 AM
TCLP SEMI-VOLATILES			SW1311/8270D				Analyst: LG	
1,4-Dichlorobenzene	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
2,4,5-Trichlorophenol	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
2,4,6-Trichlorophenol	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
2,4-Dinitrotoluene	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
2-Methylphenol	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
3&4-Methylphenol	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
Hexachlorobenzene	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
Hexachlorobutadiene	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
Hexachloroethane	<0.00938	0.00938	0.0375			mg/L	1	05/16/19 03:56 PM
Nitrobenzene	<0.0188	0.0188	0.0375			mg/L	1	05/16/19 03:56 PM
Pentachlorophenol	<0.0188	0.0188	0.0375			mg/L	1	05/16/19 03:56 PM
Pyridine	<0.0375	0.0375	0.0938			mg/L	1	05/16/19 03:56 PM
Surr: 2,4,6-Tribromophenol	99.8	0	42-124			%REC	1	05/16/19 03:56 PM
Surr: 2-Fluorobiphenyl	74.3	0	48-120			%REC	1	05/16/19 03:56 PM
Surr: 2-Fluorophenol	73.5	0	20-120			%REC	1	05/16/19 03:56 PM
Surr: 4-Terphenyl-d14	81.0	0	51-135			%REC	1	05/16/19 03:56 PM
Surr: Nitrobenzene-d5	88.0	0	41-120			%REC	1	05/16/19 03:56 PM
Surr: Phenol-d5	76.0	0	20-120			%REC	1	05/16/19 03:56 PM
TCLP VOLATILES			SW1311/8260C				Analyst: DEW	
1,1-Dichloroethene	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 06:10 PM
1,2-Dichloroethane	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 06:10 PM
1,4-Dichlorobenzene	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 06:10 PM
2-Butanone	<0.0500	0.0500	0.150			mg/L	10	05/16/19 06:10 PM
Benzene	<0.00300	0.00300	0.0100			mg/L	10	05/16/19 06:10 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level

C Sample Result or QC discussed in the Case Narrative

DF Dilution Factor

E TPH pattern not Gas or Diesel Range Pattern

J Analyte detected between MDL and RL

MDL Method Detection Limit

ND Not Detected at the Method Detection Limit

RL Reporting Limit

S Spike Recovery outside control limits

N Parameter not NELAP certified

DHL Analytical, Inc.

Date: 21-May-19

CLIENT: Terracon **Client Sample ID:** WC-18
Project: Boundary Ventures **Lab ID:** 1905098-17
Project No: 96187101 **Collection Date:** 05/08/19 12:11 PM
Lab Order: 1905098 **Matrix:** SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TCLP VOLATILES							
Carbon tetrachloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 06:10 PM
Chlorobenzene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 06:10 PM
Chloroform	<0.250	0.250	0.300		mg/L	10	05/16/19 06:10 PM
Tetrachloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 06:10 PM
Trichloroethene	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 06:10 PM
Vinyl chloride	<0.00300	0.00300	0.0100		mg/L	10	05/16/19 06:10 PM
Surr: 1,2-Dichloroethane-d4	109	0	72-119	%REC		10	05/16/19 06:10 PM
Surr: 4-Bromofluorobenzene	101	0	76-119	%REC		10	05/16/19 06:10 PM
Surr: Dibromofluoromethane	102	0	85-115	%REC		10	05/16/19 06:10 PM
Surr: Toluene-d8	96.7	0	81-120	%REC		10	05/16/19 06:10 PM
EXTRACTABLE ORGANIC HALOGENS							
Halides, Total organic as Cl (TOX)	<0.605	0.605	0.605	N	mg/Kg-dry	1	05/10/19 01:21 PM
IGNITABILITY SOLID							
Ignitability	>100	0	0		°C	1	05/17/19 12:15 PM
pH OF SOLID OR LIQ. (CORROSIVITY)							
pH	8.58	0	0		pH Units@21.3°C	1	05/09/19 01:30 PM
PERCENT MOISTURE							
Percent Moisture	17.3	0	0		WT%	1	05/17/19 08:34 AM
REACTIVITY (CYANIDE & SULFIDE)							
Reactive Cyanide	<0.0482	0.0482	0.0964	N	mg/Kg	1	05/09/19 05:18 PM
Reactive Sulfide	<19.3	19.3	19.3	N	mg/Kg	1	05/09/19 05:05 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
DF Dilution Factor
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
S Spike Recovery outside control limits

C Sample Result or QC discussed in the Case Narrative
E TPH pattern not Gas or Diesel Range Pattern
MDL Method Detection Limit
RL Reporting Limit
N Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT**RunID:** CETAC2_HG_190513D

The QC data in batch 90846 applies to the following samples: 1905098-10C, 1905098-15C, 1905098-16C

Sample ID	MB-90846	Batch ID:	90846	TestNo:	SW7471B	Units:	mg/Kg			
SampType:	MBLK	Run ID:	CETAC2_HG_190513	Analysis Date:	5/13/2019 12:59:02 PM	Prep Date:	5/10/2019			
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0160	0.0400								
Sample ID	LCS-90846	Batch ID:	90846	TestNo:	SW7471B	Units:	mg/Kg			
SampType:	LCS	Run ID:	CETAC2_HG_190513	Analysis Date:	5/13/2019 1:01:17 PM	Prep Date:	5/10/2019			
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.201	0.0400	0.2000	0	101	85	115			
Sample ID	LCSD-90846	Batch ID:	90846	TestNo:	SW7471B	Units:	mg/Kg			
SampType:	LCSD	Run ID:	CETAC2_HG_190513	Analysis Date:	5/13/2019 1:03:33 PM	Prep Date:	5/10/2019			
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.202	0.0400	0.2000	0	101	85	115	0.496	25	
Sample ID	1905049-09C MS	Batch ID:	90846	TestNo:	SW7471B	Units:	mg/Kg-dry			
SampType:	MS	Run ID:	CETAC2_HG_190513	Analysis Date:	5/13/2019 1:17:08 PM	Prep Date:	5/10/2019			
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.294	0.0440	0.2200	0.1278	75.4	80	120			S
Sample ID	1905049-09C MSD	Batch ID:	90846	TestNo:	SW7471B	Units:	mg/Kg-dry			
SampType:	MSD	Run ID:	CETAC2_HG_190513	Analysis Date:	5/13/2019 1:19:24 PM	Prep Date:	5/10/2019			
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.280	0.0394	0.1968	0.1278	77.6	80	120	4.64	25	S
Sample ID	1905049-09C SD	Batch ID:	90846	TestNo:	SW7471B	Units:	mg/Kg-dry			
SampType:	SD	Run ID:	CETAC2_HG_190513	Analysis Date:	5/13/2019 1:21:40 PM	Prep Date:	5/10/2019			
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.120	0.214	0	0.1278				5.93	10	
Sample ID	1905049-09C PDS	Batch ID:	90846	TestNo:	SW7471B	Units:	mg/Kg-dry			
SampType:	PDS	Run ID:	CETAC2_HG_190513	Analysis Date:	5/13/2019 1:23:56 PM	Prep Date:	5/10/2019			
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.374	0.0428	0.2676	0.1278	91.8	85	115			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 1 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190515A

The QC data in batch 90885 applies to the following samples: 1905098-01B, 1905098-02B, 1905098-03B, 1905098-04B, 1905098-05B, 1905098-06B, 1905098-07B, 1905098-08B

Sample ID	MB-90885	Batch ID:	90885	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	MBLK	Run ID:	CETAC2_HG_190515A <th>Analysis Date:</th> <td>5/15/2019 1:55:28 PM</td> <th>Prep Date:</th> <td>5/15/2019</td>	Analysis Date:	5/15/2019 1:55:28 PM	Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		<0.0000800	0.000200								
Sample ID	MB-90868-TCLP	Batch ID:	90885	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	MBLK	Run ID:	CETAC2_HG_190515A <th>Analysis Date:</th> <td>5/15/2019 1:57:44 PM</td> <th>Prep Date:</th> <td>5/15/2019</td>	Analysis Date:	5/15/2019 1:57:44 PM	Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		<0.000400	0.00100								
Sample ID	LCS-90885	Batch ID:	90885	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	LCS	Run ID:	CETAC2_HG_190515A <th>Analysis Date:</th> <td>5/15/2019 2:00:00 PM</td> <th>Prep Date:</th> <td>5/15/2019</td>	Analysis Date:	5/15/2019 2:00:00 PM	Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.00197	0.000200	0.002000	0	98.5	85	115			
Sample ID	LCSD-90885	Batch ID:	90885	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	LCSD	Run ID:	CETAC2_HG_190515A <th>Analysis Date:</th> <td>5/15/2019 2:02:16 PM</td> <th>Prep Date:</th> <td>5/15/2019</td>	Analysis Date:	5/15/2019 2:02:16 PM	Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.00198	0.000200	0.002000	0	99.0	85	115	0.506	15	
Sample ID	1905098-04B MS	Batch ID:	90885	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	MS	Run ID:	CETAC2_HG_190515A <th>Analysis Date:</th> <td>5/15/2019 2:20:22 PM</td> <th>Prep Date:</th> <td>5/15/2019</td>	Analysis Date:	5/15/2019 2:20:22 PM	Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0112	0.00100	0.01000	0	112	80	120			
Sample ID	1905098-04B MSD	Batch ID:	90885	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	MSD	Run ID:	CETAC2_HG_190515A <th>Analysis Date:</th> <td>5/15/2019 2:22:38 PM</td> <th>Prep Date:</th> <td>5/15/2019</td>	Analysis Date:	5/15/2019 2:22:38 PM	Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0108	0.00100	0.01000	0	108	80	120	3.19	15	
Sample ID	1905098-04B SD	Batch ID:	90885	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	SD	Run ID:	CETAC2_HG_190515A <th>Analysis Date:</th> <td>5/15/2019 2:24:54 PM</td> <th>Prep Date:</th> <td>5/15/2019</td>	Analysis Date:	5/15/2019 2:24:54 PM	Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		<0.00200	0.00500	0	0				0	10	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 2 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190515A

Sample ID	1905098-04B PDS	Batch ID:	90885	TestNo:	SW1311/7470A	Units:	mg/L
SampType:	PDS	Run ID:	CETAC2_HG_190515A	Analysis Date:	5/15/2019 2:27:10 PM	Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Mercury		0.0124	0.00100	0.01250	0	99.2	85 115

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 3 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190517A

The QC data in batch 90966 applies to the following samples: 1905098-09B, 1905098-11B, 1905098-12B, 1905098-13B, 1905098-14B, 1905098-17B

Sample ID	MB-90966	Batch ID:	90966	TestNo:	SW1311/7470A		Units:	mg/L	
SampType:	MLBK	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 3:28:20 PM		Prep Date:	5/17/2019	
Analyte									
Mercury		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD RPDLimit Qual
<0.0000800 0.000200									
Sample ID	MB-90894-TCLP	Batch ID:	90966	TestNo:	SW1311/7470A		Units:	mg/L	
SampType:	MLBK	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 3:30:36 PM		Prep Date:	5/17/2019	
Analyte									
Mercury		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD RPDLimit Qual
<0.000400 0.00100									
Sample ID	LCS-90966	Batch ID:	90966	TestNo:	SW1311/7470A		Units:	mg/L	
SampType:	LCS	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 3:35:08 PM		Prep Date:	5/17/2019	
Analyte									
Mercury		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD RPDLimit Qual
0.00171 0.000200 0.002000 0 85.5 85 115									
Sample ID	LCSD-90966	Batch ID:	90966	TestNo:	SW1311/7470A		Units:	mg/L	
SampType:	LCSD	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 3:37:25 PM		Prep Date:	5/17/2019	
Analyte									
Mercury		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD RPDLimit Qual
0.00172 0.000200 0.002000 0 86.0 85 115 0.583 15									
Sample ID	1905155-01A MS	Batch ID:	90966	TestNo:	SW1311/7470A		Units:	mg/L	
SampType:	MS	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 3:57:46 PM		Prep Date:	5/17/2019	
Analyte									
Mercury		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD RPDLimit Qual
0.00820 0.00100 0.01000 0 82.0 80 120									
Sample ID	1905155-01A MSD	Batch ID:	90966	TestNo:	SW1311/7470A		Units:	mg/L	
SampType:	MSD	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 4:00:03 PM		Prep Date:	5/17/2019	
Analyte									
Mercury		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD RPDLimit Qual
0.00835 0.00100 0.01000 0 83.5 80 120 1.81 15									
Sample ID	1905155-01A SD	Batch ID:	90966	TestNo:	SW1311/7470A		Units:	mg/L	
SampType:	SD	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 4:02:19 PM		Prep Date:	5/17/2019	
Analyte									
Mercury		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD RPDLimit Qual
<0.00200 0.00500 0 0 0 0 0 0 10									

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 4 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190517A

Sample ID	1905155-01A PDS	Batch ID:	90966	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	PDS	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 4:04:35 PM	Prep Date:	5/17/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.0114	0.00100	0.01250	0	91.6	85	115			
Sample ID	1905177-01C MS	Batch ID:	90966	TestNo:	SW1311/7470A	Units:	mg/L				
SampType:	MS	Run ID:	CETAC2_HG_190517A	Analysis Date:	5/17/2019 4:11:23 PM	Prep Date:	5/17/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury		0.00815	0.00100	0.01000	0	81.5	80	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 5 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190514A

The QC data in batch 90856 applies to the following samples: 1905098-10C, 1905098-15C, 1905098-16C

Sample ID	MB-90856	Batch ID:	90856	TestNo:	SW6020A	Units:	mg/Kg				
SampType:	MLBK	Run ID:	ICP-MS4_190514A	Analysis Date: 5/14/2019 11:13:00 AM		Prep Date:	5/13/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum		<12.5	37.5								
Antimony		<0.500	1.00								
Arsenic		<0.500	1.00								
Barium		<0.500	2.00								
Beryllium		<0.100	0.300								
Cadmium		<0.100	0.300								
Calcium		<12.5	37.5								
Chromium		<0.500	2.00								
Cobalt		<0.500	2.00								
Copper		<0.500	2.00								
Iron		<12.5	37.5								
Lead		<0.100	0.300								
Lithium		<0.500	2.00								
Magnesium		<12.5	37.5								
Manganese		<0.500	2.00								
Molybdenum		<0.500	2.00								
Nickel		<0.500	2.00								
Potassium		<12.5	37.5								
Selenium		<0.150	0.500								
Silver		<0.100	0.200								
Sodium		18.8	37.5								
Thallium		<0.500	1.00								
Vanadium		<1.00	2.50								
Zinc		<1.00	2.50								

Sample ID	LCS-90856	Batch ID:	90856	TestNo:	SW6020A	Units:	mg/Kg				
SampType:	LCS	Run ID:	ICP-MS4_190514A	Analysis Date: 5/14/2019 11:15:00 AM		Prep Date:	5/13/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum		251	37.5	250.0	0	100	80	120			
Antimony		49.0	1.00	50.00	0	98.1	80	120			
Arsenic		48.5	1.00	50.00	0	97.0	80	120			
Barium		49.3	2.00	50.00	0	98.7	80	120			
Beryllium		51.2	0.300	50.00	0	102	80	120			
Cadmium		49.8	0.300	50.00	0	99.7	80	120			
Calcium		1220	37.5	1250	0	97.8	80	120			
Chromium		50.9	2.00	50.00	0	102	80	120			
Cobalt		50.8	2.00	50.00	0	102	80	120			
Copper		51.7	2.00	50.00	0	103	80	120			
Iron		261	37.5	250.0	0	105	80	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 6 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190514A

Sample ID	LCS-90856	Batch ID:	90856	TestNo:	SW6020A		Units:	mg/Kg			
SampType:	LCS <th>Run ID:</th> <td>ICP-MS4_190514A<th data-cs="3" data-kind="parent">Analysis Date: 5/14/2019 11:15:00 AM</th><th data-kind="ghost"></th><th data-kind="ghost"></th><th>Prep Date:</th><td data-cs="3" data-kind="parent">5/13/2019</td><td data-kind="ghost"></td><td data-kind="ghost"></td></td>	Run ID:	ICP-MS4_190514A <th data-cs="3" data-kind="parent">Analysis Date: 5/14/2019 11:15:00 AM</th> <th data-kind="ghost"></th> <th data-kind="ghost"></th> <th>Prep Date:</th> <td data-cs="3" data-kind="parent">5/13/2019</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>	Analysis Date: 5/14/2019 11:15:00 AM			Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead		48.4	0.300	50.00	0	96.7	80	120			
Lithium		52.9	2.00	50.00	0	106	80	120			
Magnesium		1290	37.5	1250	0	104	80	120			
Manganese		50.3	2.00	50.00	0	101	80	120			
Molybdenum		49.2	2.00	50.00	0	98.4	80	120			
Nickel		50.5	2.00	50.00	0	101	80	120			
Potassium		1270	37.5	1250	0	102	80	120			
Selenium		46.9	0.500	50.00	0	93.7	80	120			
Silver		50.8	0.200	50.00	0	102	80	120			
Sodium		1310	37.5	1250	0	105	80	120			
Thallium		50.7	1.00	50.00	0	101	80	120			
Vanadium		49.8	2.50	50.00	0	99.6	80	120			
Zinc		48.7	2.50	50.00	0	97.4	80	120			

Sample ID	LCSD-90856	Batch ID:	90856	TestNo:	SW6020A		Units:	mg/Kg			
SampType:	LCSD	Run ID:	ICP-MS4_190514A	Analysis Date: 5/14/2019 11:17:00 AM			Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum		250	37.5	250.0	0	100	80	120	0.427	25	
Antimony		49.3	1.00	50.00	0	98.7	80	120	0.617	25	
Arsenic		48.4	1.00	50.00	0	96.8	80	120	0.149	25	
Barium		50.2	2.00	50.00	0	100	80	120	1.82	25	
Beryllium		51.2	0.300	50.00	0	102	80	120	0.015	25	
Cadmium		49.3	0.300	50.00	0	98.6	80	120	1.09	25	
Calcium		1210	37.5	1250	0	97.0	80	120	0.773	25	
Chromium		50.8	2.00	50.00	0	102	80	120	0.148	25	
Cobalt		50.4	2.00	50.00	0	101	80	120	0.703	25	
Copper		51.2	2.00	50.00	0	102	80	120	0.857	25	
Iron		258	37.5	250.0	0	103	80	120	1.27	25	
Lead		48.0	0.300	50.00	0	96.0	80	120	0.735	25	
Lithium		52.1	2.00	50.00	0	104	80	120	1.57	25	
Magnesium		1290	37.5	1250	0	103	80	120	0.469	25	
Manganese		49.7	2.00	50.00	0	99.4	80	120	1.20	25	
Molybdenum		49.3	2.00	50.00	0	98.6	80	120	0.135	25	
Nickel		49.7	2.00	50.00	0	99.5	80	120	1.56	25	
Potassium		1260	37.5	1250	0	101	80	120	1.08	25	
Selenium		46.6	0.500	50.00	0	93.2	80	120	0.557	25	
Silver		50.8	0.200	50.00	0	102	80	120	0.000	25	
Sodium		1350	37.5	1250	0	108	80	120	2.48	25	
Thallium		49.5	1.00	50.00	0	99.1	80	120	2.32	25	
Vanadium		49.5	2.50	50.00	0	99.1	80	120	0.494	25	

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190514A

Sample ID	LCSD-90856	Batch ID:	90856	TestNo:	SW6020A	Units:	mg/Kg				
SampType:	LCSD	Run ID:	ICP-MS4_190514A	Analysis Date: 5/14/2019 11:17:00 AM		Prep Date:	5/13/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Zinc		48.6	2.50	50.00	0	97.2	80	120	0.164	25	

Sample ID	1905098-16C SD	Batch ID:	90856	TestNo:	SW6020A	Units:	mg/Kg-dry				
SampType:	SD	Run ID:	ICP-MS4_190514A	Analysis Date: 5/14/2019 11:23:00 AM		Prep Date:	5/13/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		3.78	6.49	0	3.693				2.45	10	
Arsenic		11.7	6.49	0	11.11				4.93	10	
Beryllium		<0.649	1.95	0	0.6035				0	10	
Cadmium		<0.649	1.95	0	0.3212				0	10	
Chromium		39.2	13.0	0	36.74				6.43	10	
Cobalt		5.79	13.0	0	5.486				5.40	10	
Copper		51.9	13.0	0	47.28				9.28	10	
Lead		37.9	1.95	0	39.00				2.94	10	
Lithium		13.2	13.0	0	11.67				12.4	10	R
Magnesium		4100	243	0	3932				4.18	10	
Manganese		330	13.0	0	317.6				3.97	10	
Molybdenum		11.7	13.0	0	11.79				0.985	10	
Nickel		33.0	13.0	0	31.06				6.18	10	
Potassium		2450	243	0	2469				0.933	10	
Selenium		8.46	3.24	0	7.433				12.9	10	R
Silver		<0.649	1.30	0	0.1489				0	10	
Sodium		2230	243	0	2174				2.76	10	
Thallium		<3.24	6.49	0	0				0	10	
Vanadium		64.0	16.2	0	61.68				3.61	10	
Zinc		157	16.2	0	141.7				10.5	10	

Sample ID	1905098-16C PDS	Batch ID:	90856	TestNo:	SW6020A	Units:	mg/Kg-dry				
SampType:	PDS	Run ID:	ICP-MS4_190514A	Analysis Date: 5/14/2019 11:42:00 AM		Prep Date:	5/13/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		67.9	1.30	64.89	3.693	98.9	80	120			
Arsenic		77.7	1.30	64.89	11.11	103	80	120			
Beryllium		58.6	0.389	64.89	0.6035	89.4	80	120			
Cadmium		62.4	0.389	64.89	0.3212	95.7	80	120			
Chromium		104	2.60	64.89	36.74	104	80	120			
Cobalt		70.8	2.60	64.89	5.486	101	80	120			
Copper		111	2.60	64.89	47.28	97.5	80	120			
Lead		108	0.389	64.89	39.00	107	80	120			
Lithium		72.0	2.60	64.89	11.67	92.9	80	120			
Magnesium		5730	48.7	1622	3932	111	80	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190514A

Sample ID	1905098-16C PDS	Batch ID:	90856	TestNo:	SW6020A		Units:	mg/Kg-dry			
SampType:	PDS	Run ID:	ICP-MS4_190514A	Analysis Date: 5/14/2019 11:42:00 AM			Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese		401	2.60	64.89	317.6	128	80	120			S
Molybdenum		73.5	2.60	64.89	11.79	95.1	80	120			
Nickel		95.9	2.60	64.89	31.06	99.9	80	120			
Potassium		4250	48.7	1622	2469	110	80	120			
Selenium		71.4	0.649	64.89	7.433	98.5	80	120			
Silver		61.2	0.260	64.89	0.1489	94.0	80	120			
Sodium		3920	48.7	1622	2174	108	80	120			
Thallium		66.5	1.30	64.89	0	103	80	120			
Vanadium		132	3.24	64.89	61.68	108	80	120			
Zinc		211	3.24	64.89	141.7	107	80	120			

Sample ID	1905098-16C MS	Batch ID:	90856	TestNo:	SW6020A		Units:	mg/Kg-dry			
SampType:	MS	Run ID:	ICP-MS4_190514A	Analysis Date: 5/14/2019 11:44:00 AM			Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum		17600	50.1	334.1	15710	569	80	120			S
Antimony		58.3	1.34	66.82	3.693	81.7	80	120			
Arsenic		78.7	1.34	66.82	11.11	101	80	120			
Barium		9690	2.67	66.82	6595	4640	80	120			S
Beryllium		57.4	0.401	66.82	0.6035	84.9	80	120			
Cadmium		62.5	0.401	66.82	0.3212	93.0	80	120			
Calcium		81700	50.1	1671	77670	239	80	120			S
Chromium		112	2.67	66.82	36.74	112	80	120			
Cobalt		69.8	2.67	66.82	5.486	96.3	80	120			
Copper		148	2.67	66.82	47.28	151	80	120			S
Iron		29000	50.1	334.1	19610	2800	80	120			S
Lead		107	0.401	66.82	39.00	101	80	120			
Lithium		71.1	2.67	66.82	11.67	89.0	80	120			
Magnesium		5690	50.1	1671	3932	105	80	120			
Manganese		439	2.67	66.82	317.6	182	80	120			S
Molybdenum		79.1	2.67	66.82	11.79	101	80	120			
Nickel		107	2.67	66.82	31.06	114	80	120			
Potassium		4430	50.1	1671	2469	117	80	120			
Selenium		70.4	0.668	66.82	7.433	94.2	80	120			
Silver		60.9	0.267	66.82	0.1489	90.8	80	120			
Sodium		3880	50.1	1671	2174	102	80	120			
Thallium		66.8	1.34	66.82	0	100	80	120			
Vanadium		131	3.34	66.82	61.68	103	80	120			
Zinc		210	3.34	66.82	141.7	102	80	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 9 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190514A

Sample ID	1905098-16C MSD	Batch ID:	90856	TestNo:	SW6020A		Units:	mg/Kg-dry			
SampType:	MSD	Run ID:	ICP-MS4_190514A	Analysis Date:	5/14/2019 11:46:00 AM		Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum		18100	50.1	334.1	15710	707	80	120	2.59	25	S
Antimony		58.8	1.34	66.82	3.693	82.4	80	120	0.840	25	
Arsenic		79.5	1.34	66.82	11.11	102	80	120	0.982	25	
Barium		9610	2.67	66.82	6595	4510	80	120	0.874	25	
Beryllium		58.8	0.401	66.82	0.6035	87.2	80	120	2.55	25	
Cadmium		62.7	0.401	66.82	0.3212	93.4	80	120	0.390	25	
Calcium		84600	50.1	1671	77670	417	80	120	3.58	25	S
Chromium		108	2.67	66.82	36.74	107	80	120	3.08	25	
Cobalt		69.9	2.67	66.82	5.486	96.4	80	120	0.160	25	
Copper		136	2.67	66.82	47.28	132	80	120	8.74	25	S
Iron		25000	50.1	334.1	19610	1630	80	120	14.5	25	S
Lead		110	0.401	66.82	39.00	107	80	120	3.23	25	
Lithium		71.2	2.67	66.82	11.67	89.0	80	120	0.038	25	
Magnesium		5850	50.1	1671	3932	115	80	120	2.79	25	
Manganese		438	2.67	66.82	317.6	180	80	120	0.313	25	S
Molybdenum		78.7	2.67	66.82	11.79	100	80	120	0.575	25	
Nickel		102	2.67	66.82	31.06	106	80	120	4.79	25	
Potassium		4470	50.1	1671	2469	120	80	120	0.909	25	
Selenium		72.1	0.668	66.82	7.433	96.8	80	120	2.41	25	
Silver		61.4	0.267	66.82	0.1489	91.6	80	120	0.842	25	
Sodium		3940	50.1	1671	2174	105	80	120	1.43	25	
Thallium		67.5	1.34	66.82	0	101	80	120	1.01	25	
Vanadium		134	3.34	66.82	61.68	107	80	120	2.19	25	
Zinc		214	3.34	66.82	141.7	108	80	120	1.77	25	

Sample ID	1905098-16C SD	Batch ID:	90856	TestNo:	SW6020A		Units:	mg/Kg-dry			
SampType:	SD	Run ID:	ICP-MS4_190514A	Analysis Date:	5/14/2019 12:11:00 PM		Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum		16200	4870	0	16100				0.774	10	
Barium		6520	260	0	6329				3.03	10	
Calcium		79500	4870	0	77830				2.16	10	
Iron		23800	4870	0	21380				10.8	10	R

Sample ID	1905098-16C PDS	Batch ID:	90856	TestNo:	SW6020A		Units:	mg/Kg-dry			
SampType:	PDS	Run ID:	ICP-MS4_190514A	Analysis Date:	5/14/2019 12:13:00 PM		Prep Date:	5/13/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aluminum		46300	973	32450	16100	93.2	80	120			
Barium		8020	51.9	1298	6329	131	80	120			S
Calcium		110000	973	32450	77830	98.7	80	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor							
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit							Page 10 of 61
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits							
	RL	Reporting Limit	S	Spike Recovery outside control limits							
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified							

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190514A

Sample ID	1905098-16C PDS	Batch ID:	90856	TestNo:	SW6020A	Units:	mg/Kg-dry			
SampType:	PDS	Run ID:	ICP-MS4_190514A	Analysis Date:	5/14/2019 12:13:00 PM	Prep Date:	5/13/2019			
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	53500	973	32450	21380	98.9	80	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 11 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190516A

The QC data in batch 90920 applies to the following samples: 1905098-09B, 1905098-11B, 1905098-12B, 1905098-13B, 1905098-14B, 1905098-17B

Sample ID	MB-90920	Batch ID:	90920	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	MLBK	Run ID:	ICP-MS4_190516A	Analysis Date: 5/16/2019 11:29:00 AM		Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		<0.000800	0.00250				
Arsenic		<0.00200	0.00500				
Barium		<0.00300	0.0100				
Beryllium		<0.000300	0.00100				
Cadmium		<0.000300	0.00100				
Chromium		<0.00200	0.00500				
Lead		<0.000300	0.00100				
Nickel		<0.00300	0.0100				
Selenium		<0.00200	0.00500				
Silver		<0.00100	0.00200				

Sample ID	MB-90894-TCLP	Batch ID:	90920	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	MLBK	Run ID:	ICP-MS4_190516A	Analysis Date: 5/16/2019 11:31:00 AM		Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		<0.00400	0.0125				
Arsenic		<0.0100	0.0250				
Barium		<0.0150	0.0500				
Beryllium		<0.00150	0.00500				
Cadmium		<0.00150	0.00500				
Chromium		<0.0100	0.0250				
Lead		<0.00150	0.00500				
Nickel		<0.0150	0.0500				
Selenium		<0.0100	0.0250				
Silver		<0.00500	0.0100				

Sample ID	LCS-90920	Batch ID:	90920	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	LCS	Run ID:	ICP-MS4_190516A	Analysis Date: 5/16/2019 11:33:00 AM		Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		0.189	0.00250	0.2000	0	94.3	80 120
Arsenic		0.173	0.00500	0.2000	0	86.5	80 120
Barium		0.192	0.0100	0.2000	0	95.8	80 120
Beryllium		0.205	0.00100	0.2000	0	103	80 120
Cadmium		0.190	0.00100	0.2000	0	95.2	80 120
Chromium		0.201	0.00500	0.2000	0	100	80 120
Lead		0.193	0.00100	0.2000	0	96.6	80 120
Nickel		0.185	0.0100	0.2000	0	92.5	80 120
Selenium		0.164	0.00500	0.2000	0	82.2	80 120
Silver		0.197	0.00200	0.2000	0	98.4	80 120

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 12 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190516A

Sample ID	LCSD-90920	Batch ID:	90920	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	LCSD	Run ID:	ICP-MS4_190516A	Analysis Date: 5/16/2019 11:35:00 AM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		0.195	0.00250	0.2000	0	97.6	80	120	3.40	15	
Arsenic		0.173	0.00500	0.2000	0	86.4	80	120	0.078	15	
Barium		0.194	0.0100	0.2000	0	97.0	80	120	1.20	15	
Beryllium		0.208	0.00100	0.2000	0	104	80	120	1.56	15	
Cadmium		0.195	0.00100	0.2000	0	97.7	80	120	2.65	15	
Chromium		0.204	0.00500	0.2000	0	102	80	120	1.62	15	
Lead		0.196	0.00100	0.2000	0	98.0	80	120	1.42	15	
Nickel		0.185	0.0100	0.2000	0	92.3	80	120	0.198	15	
Selenium		0.165	0.00500	0.2000	0	82.4	80	120	0.294	15	
Silver		0.201	0.00200	0.2000	0	100	80	120	1.92	15	
Sample ID	1905155-01A SD	Batch ID:	90920	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	SD	Run ID:	ICP-MS4_190516A	Analysis Date: 5/16/2019 11:41:00 AM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		<0.0200	0.0625	0	0				0	10	
Arsenic		<0.0500	0.125	0	0				0	10	
Barium		0.601	0.250	0	0.6144				2.24	10	
Beryllium		<0.00750	0.0250	0	0				0	10	
Cadmium		<0.00750	0.0250	0	0				0	10	
Chromium		<0.0500	0.125	0	0				0	10	
Lead		<0.00750	0.0250	0	0				0	10	
Nickel		<0.0750	0.250	0	0				0	10	
Selenium		<0.0500	0.125	0	0				0	10	
Silver		<0.0250	0.0500	0	0				0	10	
Sample ID	1905155-01A PDS	Batch ID:	90920	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	PDS	Run ID:	ICP-MS4_190516A	Analysis Date: 5/16/2019 11:55:00 AM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		0.963	0.0125	1.000	0	96.3	80	120			
Arsenic		0.822	0.0250	1.000	0	82.2	80	120			
Barium		1.53	0.0500	1.000	0.6144	91.9	80	120			
Beryllium		0.969	0.00500	1.000	0	96.9	80	120			
Cadmium		0.943	0.00500	1.000	0	94.3	80	120			
Chromium		0.980	0.0250	1.000	0	98.0	80	120			
Lead		0.932	0.00500	1.000	0	93.2	80	120			
Nickel		0.821	0.0500	1.000	0	82.1	80	120			
Selenium		0.808	0.0250	1.000	0	80.8	80	120			
Silver		0.921	0.0100	1.000	0	92.1	80	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 13 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190516A

Sample ID	1905155-01A MS	Batch ID:	90920	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	MS	Run ID:	ICP-MS4_190516A	Analysis Date:	5/16/2019 11:57:00 AM		Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		0.976	0.0125	1.000	0	97.6	80	120			
Arsenic		0.854	0.0250	1.000	0	85.4	80	120			
Barium		1.59	0.0500	1.000	0.6144	97.7	80	120			
Beryllium		0.956	0.00500	1.000	0	95.6	80	120			
Cadmium		0.949	0.00500	1.000	0	94.9	80	120			
Chromium		0.952	0.0250	1.000	0	95.2	80	120			
Lead		0.942	0.00500	1.000	0	94.2	80	120			
Nickel		0.831	0.0500	1.000	0	83.1	80	120			
Selenium		0.847	0.0250	1.000	0	84.7	80	120			
Silver		0.936	0.0100	1.000	0	93.6	80	120			

Sample ID	1905155-01A MSD	Batch ID:	90920	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	MSD	Run ID:	ICP-MS4_190516A	Analysis Date:	5/16/2019 11:59:00 AM		Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		1.00	0.0125	1.000	0	100	80	120	2.48	15	
Arsenic		0.880	0.0250	1.000	0	88.0	80	120	2.98	15	
Barium		1.64	0.0500	1.000	0.6144	102	80	120	2.78	15	
Beryllium		0.968	0.00500	1.000	0	96.8	80	120	1.21	15	
Cadmium		0.962	0.00500	1.000	0	96.2	80	120	1.40	15	
Chromium		0.973	0.0250	1.000	0	97.3	80	120	2.18	15	
Lead		0.952	0.00500	1.000	0	95.2	80	120	1.04	15	
Nickel		0.866	0.0500	1.000	0	86.6	80	120	4.17	15	
Selenium		0.867	0.0250	1.000	0	86.7	80	120	2.34	15	
Silver		0.947	0.0100	1.000	0	94.7	80	120	1.15	15	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 14 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_190515C

The QC data in batch 90903 applies to the following samples: 1905098-01B, 1905098-02B, 1905098-03B, 1905098-04B, 1905098-05B, 1905098-06B, 1905098-07B, 1905098-08B

Sample ID	MB-90903	Batch ID:	90903	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	MLBK	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:00:00 PM		Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		<0.000800	0.00250								
Arsenic		<0.00200	0.00500								
Barium		<0.00300	0.0100								
Beryllium		<0.000300	0.00100								
Cadmium		<0.000300	0.00100								
Chromium		<0.00200	0.00500								
Lead		<0.000300	0.00100								
Nickel		<0.00300	0.0100								
Selenium		<0.00200	0.00500								
Silver		<0.00100	0.00200								

Sample ID	MB-90868-TCLP	Batch ID:	90903	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	MLBK	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:03:00 PM		Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		<0.00400	0.0125								
Arsenic		<0.0100	0.0250								
Barium		<0.0150	0.0500								
Beryllium		<0.00150	0.00500								
Cadmium		<0.00150	0.00500								
Chromium		<0.0100	0.0250								
Lead		<0.00150	0.00500								
Nickel		<0.0150	0.0500								
Selenium		<0.0100	0.0250								
Silver		<0.00500	0.0100								

Sample ID	LCS-90903	Batch ID:	90903	TestNo:	SW1311/6020A		Units:	mg/L			
SampType:	LCS	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:05:00 PM		Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Antimony		0.198	0.00250	0.2000	0	98.8	80	120			
Arsenic		0.205	0.00500	0.2000	0	103	80	120			
Barium		0.197	0.0100	0.2000	0	98.3	80	120			
Beryllium		0.183	0.00100	0.2000	0	91.5	80	120			
Cadmium		0.196	0.00100	0.2000	0	98.2	80	120			
Chromium		0.194	0.00500	0.2000	0	96.8	80	120			
Lead		0.192	0.00100	0.2000	0	96.0	80	120			
Nickel		0.212	0.0100	0.2000	0	106	80	120			
Selenium		0.202	0.00500	0.2000	0	101	80	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 15 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_190515C

Sample ID	LCS-90903	Batch ID:	90903	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	LCS	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:05:00 PM	Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Silver		0.197	0.00200	0.2000	0	98.7	80 120

Sample ID	LCSD-90903	Batch ID:	90903	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	LCSD	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:07:00 PM	Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		0.199	0.00250	0.2000	0	99.6	80 120 0.748 15
Arsenic		0.210	0.00500	0.2000	0	105	80 120 2.42 15
Barium		0.198	0.0100	0.2000	0	99.2	80 120 0.890 15
Beryllium		0.185	0.00100	0.2000	0	92.7	80 120 1.25 15
Cadmium		0.198	0.00100	0.2000	0	98.8	80 120 0.614 15
Chromium		0.197	0.00500	0.2000	0	98.4	80 120 1.64 15
Lead		0.194	0.00100	0.2000	0	97.2	80 120 1.20 15
Nickel		0.215	0.0100	0.2000	0	108	80 120 1.67 15
Selenium		0.213	0.00500	0.2000	0	106	80 120 5.08 15
Silver		0.198	0.00200	0.2000	0	98.8	80 120 0.063 15

Sample ID	1905098-04B SD	Batch ID:	90903	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	SD	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:14:00 PM	Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		<0.0200	0.0625	0	0		0 10
Arsenic		<0.0500	0.125	0	0.01475		0 10
Barium		0.745	0.250	0	0.7423		0.346 10
Beryllium		<0.00750	0.0250	0	0		0 10
Cadmium		<0.00750	0.0250	0	0		0 10
Chromium		<0.0500	0.125	0	0		0 10
Lead		<0.00750	0.0250	0	0		0 10
Nickel		<0.0750	0.250	0	0		0 10
Selenium		<0.0500	0.125	0	0		0 10
Silver		<0.0250	0.0500	0	0		0 10

Sample ID	1905098-04B PDS	Batch ID:	90903	TestNo:	SW1311/6020A	Units:	mg/L
SampType:	PDS	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:36:00 PM	Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
Antimony		0.988	0.0125	1.000	0	98.8	80 120
Arsenic		0.997	0.0250	1.000	0.01475	98.2	80 120
Barium		1.68	0.0500	1.000	0.7423	94.3	80 120
Beryllium		0.920	0.00500	1.000	0	92.0	80 120
Cadmium		0.966	0.00500	1.000	0	96.6	80 120

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 16 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS5_190515C

Sample ID	1905098-04B PDS	Batch ID:	90903	TestNo:	SW1311/6020A		Units:	mg/L
SampType:	PDS	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:36:00 PM		Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit
Chromium		0.971	0.0250	1.000	0	97.1	80	120
Lead		0.970	0.00500	1.000	0	97.0	80	120
Nickel		1.01	0.0500	1.000	0	101	80	120
Selenium		0.968	0.0250	1.000	0	96.8	80	120
Silver		0.956	0.0100	1.000	0	95.6	80	120
Sample ID	1905098-04B MS	Batch ID:	90903	TestNo:	SW1311/6020A		Units:	mg/L
SampType:	MS	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:38:00 PM		Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit
Antimony		1.03	0.0125	1.000	0	103	80	120
Arsenic		1.03	0.0250	1.000	0.01475	101	80	120
Barium		1.75	0.0500	1.000	0.7423	101	80	120
Beryllium		0.941	0.00500	1.000	0	94.1	80	120
Cadmium		0.979	0.00500	1.000	0	97.9	80	120
Chromium		0.975	0.0250	1.000	0	97.5	80	120
Lead		0.976	0.00500	1.000	0	97.6	80	120
Nickel		1.02	0.0500	1.000	0	102	80	120
Selenium		0.986	0.0250	1.000	0	98.6	80	120
Silver		0.972	0.0100	1.000	0	97.2	80	120
Sample ID	1905098-04B MSD	Batch ID:	90903	TestNo:	SW1311/6020A		Units:	mg/L
SampType:	MSD	Run ID:	ICP-MS5_190515C	Analysis Date:	5/15/2019 3:41:00 PM		Prep Date:	5/15/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit
Antimony		1.05	0.0125	1.000	0	105	80	120
Arsenic		1.07	0.0250	1.000	0.01475	105	80	120
Barium		1.81	0.0500	1.000	0.7423	107	80	120
Beryllium		0.975	0.00500	1.000	0	97.5	80	120
Cadmium		1.01	0.00500	1.000	0	101	80	120
Chromium		1.01	0.0250	1.000	0	101	80	120
Lead		0.998	0.00500	1.000	0	99.8	80	120
Nickel		1.04	0.0500	1.000	0	104	80	120
Selenium		1.02	0.0250	1.000	0	102	80	120
Silver		0.998	0.0100	1.000	0	99.8	80	120

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 17 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_190510B

The QC data in batch 90823 applies to the following samples: 1905098-10B, 1905098-15B, 1905098-16B

Sample ID	MB-90823	Batch ID:	90823	TestNo:	SW8270D	Units:	mg/Kg
SampType:	MLBK	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 12:57:00 PM		Prep Date:	5/10/2019
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
1,2,4-Trichlorobenzene		<0.0100	0.0266				
1,2-Dichlorobenzene		<0.0100	0.0266				
1,3-Dichlorobenzene		<0.0100	0.0266				
1,4-Dichlorobenzene		<0.0100	0.0266				
2,4,5-Trichlorophenol		<0.0100	0.0266				
2,4,6-Trichlorophenol		<0.0100	0.0266				
2,4-Dichlorophenol		<0.0100	0.0266				
2,4-Dimethylphenol		<0.0100	0.0266				
2,4-Dinitrophenol		<0.0500	0.132				
2,4-Dinitrotoluene		<0.0100	0.0266				
2,6-Dichlorophenol		<0.0100	0.0266				
2,6-Dinitrotoluene		<0.0100	0.0266				
2-Chloronaphthalene		<0.0100	0.0266				
2-Chlorophenol		<0.0100	0.0266				
2-Methylnaphthalene		<0.0100	0.0266				
2-Methylphenol		<0.0100	0.0266				
2-Nitroaniline		<0.0100	0.0266				
2-Nitrophenol		<0.0100	0.0266				
3,3'-Dichlorobenzidine		<0.0100	0.0266				
3-Nitroaniline		<0.0100	0.0266				
4,6-Dinitro-2-methylphenol		<0.0300	0.0660				
4-Bromophenyl phenyl ether		<0.0100	0.0266				
4-Chloro-3-methylphenol		<0.0100	0.0266				
4-Chloroaniline		<0.0300	0.0660				
4-Chlorophenyl phenyl ether		<0.0100	0.0266				
4-Methylphenol		<0.0200	0.0266				
4-Nitroaniline		<0.0100	0.0266				
4-Nitrophenol		<0.0500	0.132				
Acenaphthene		<0.0100	0.0266				
Acenaphthylene		<0.0100	0.0266				
Aniline		<0.0660	0.132				
Anthracene		<0.0100	0.0266				
Benzo[a]anthracene		<0.0100	0.0266				
Benzo[a]pyrene		<0.0100	0.0266				
Benzo[b]fluoranthene		<0.0100	0.0266				
Benzo[g,h,i]perylene		<0.0100	0.0266				
Benzo[k]fluoranthene		<0.0100	0.0266				
Benzyl alcohol		<0.0300	0.0660				
Bis(2-chloroethoxy)methane		<0.0100	0.0266				
Bis(2-chloroethyl)ether		<0.0100	0.0266				

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 18 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_190510B

Sample ID	MB-90823	Batch ID:	90823	TestNo:	SW8270D	Units:	mg/Kg				
SampType:	MBLK	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 12:57:00 PM		Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bis(2-chloroisopropyl)ether		<0.0100	0.0266								
Bis(2-ethylhexyl)phthalate		<0.0300	0.0660								
Butyl benzyl phthalate		<0.0400	0.0660								
Carbazole		<0.0100	0.0266								
Chrysene		<0.0100	0.0266								
Dibenz[a,h]anthracene		<0.0100	0.0266								
Dibenzofuran		<0.0100	0.0266								
Diethyl phthalate		<0.0400	0.0660								
Dimethyl phthalate		<0.0400	0.0660								
Di-n-butyl phthalate		<0.0400	0.0660								
Di-n-octyl phthalate		<0.0400	0.0660								
Fluoranthene		<0.0100	0.0266								
Fluorene		<0.0100	0.0266								
Hexachlorobenzene		<0.0100	0.0266								
Hexachlorobutadiene		<0.0100	0.0266								
Hexachlorocyclopentadiene		<0.0300	0.0660								
Hexachloroethane		<0.0100	0.0266								
Indeno[1,2,3-cd]pyrene		<0.0100	0.0266								
Isophorone		<0.0300	0.0660								
Naphthalene		<0.0100	0.0266								
Nitrobenzene		<0.0100	0.0266								
N-Nitrosodiethylamine		<0.0100	0.0266								
N-Nitrosodi-n-propylamine		<0.0100	0.0266								
N-Nitrosodiphenylamine		<0.0100	0.0266								
Pentachlorophenol		<0.0100	0.0266								
Phenanthrene		<0.0100	0.0266								
Phenol		<0.0100	0.0266								
Pyrene		<0.0100	0.0266								
Pyridine		<0.0500	0.132								
Surr: 2,4,6-Tribromophenol		0.780	0.6670			117	45	126			
Surr: 2-Fluorobiphenyl		0.567	0.6670			85.0	60	125			
Surr: 2-Fluorophenol		0.533	0.6670			80.0	37	125			
Surr: 4-Terphenyl-d14		0.887	0.6670			133	45	125			S
Surr: Nitrobenzene-d5		0.460	0.6670			69.0	45	125			
Surr: Phenol-d5		0.480	0.6670			72.0	40	125			

Sample ID	LCS-90823	Batch ID:	90823	TestNo:	SW8270D	Units:	mg/Kg				
SampType:	LCS	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 1:22:00 PM		Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene		1.09	0.0266	1.340	0	81.5	44	125			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 19 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_190510B

Sample ID	LCS-90823	Batch ID:	90823	TestNo:	SW8270D		Units:	mg/Kg			
SampType:	LCS	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 1:22:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene		1.02	0.0266	1.340	0	76.2	45	125			
1,3-Dichlorobenzene		0.960	0.0266	1.340	0	71.6	39	125			
1,4-Dichlorobenzene		1.11	0.0266	1.340	0	83.1	35	125			
2,4,5-Trichlorophenol		1.32	0.0266	1.340	0	98.3	49	125			
2,4,6-Trichlorophenol		1.27	0.0266	1.340	0	94.8	43	125			
2,4-Dichlorophenol		1.21	0.0266	1.340	0	90.0	45	125			
2,4-Dimethylphenol		1.16	0.0266	1.340	0	86.5	32	125			
2,4-Dinitrophenol		0.864	0.132	1.340	0	64.5	25	132			
2,4-Dinitrotoluene		1.31	0.0266	1.340	0	97.4	48	125			
2,6-Dichlorophenol		1.28	0.0266	1.340	0	95.4	38	125			
2,6-Dinitrotoluene		1.29	0.0266	1.340	0	96.3	48	125			
2-Chloronaphthalene		1.06	0.0266	1.340	0	79.4	45	125			
2-Chlorophenol		1.04	0.0266	1.340	0	77.9	44	125			
2-Methylnaphthalene		1.07	0.0266	1.340	0	80.1	47	125			
2-Methylphenol		1.06	0.0266	1.340	0	79.1	40	125			
2-Nitroaniline		1.19	0.0266	1.340	0	88.5	44	125			
2-Nitrophenol		0.992	0.0266	1.340	0	74.0	42	125			
3,3'-Dichlorobenzidine		0.894	0.0266	1.340	0	66.7	25	128			
3-Nitroaniline		0.979	0.0266	1.340	0	73.0	27	125			
4,6-Dinitro-2-methylphenol		1.18	0.0660	1.340	0	87.7	29	137			
4-Bromophenyl phenyl ether		1.70	0.0266	1.340	0	127	46	125			S
4-Chloro-3-methylphenol		1.31	0.0266	1.340	0	97.4	46	125			
4-Chloroaniline		0.705	0.0660	1.340	0	52.6	34	125			
4-Chlorophenyl phenyl ether		1.39	0.0266	1.340	0	104	47	125			
4-Methylphenol		1.12	0.0266	1.340	0	83.7	41	125			
4-Nitroaniline		1.10	0.0266	1.340	0	81.9	34	125			
4-Nitrophenol		1.16	0.132	1.340	0	86.7	25	138			
Acenaphthene		1.04	0.0266	1.340	0	77.6	46	125			
Acenaphthylene		1.20	0.0266	1.340	0	89.4	44	125			
Aniline		0.337	0.132	1.340	0	25.1	20	125			
Anthracene		1.26	0.0266	1.340	0	94.0	53	125			
Benzo[a]anthracene		1.31	0.0266	1.340	0	97.9	52	125			
Benzo[a]pyrene		1.40	0.0266	1.340	0	104	50	125			
Benzo[b]fluoranthene		1.38	0.0266	1.340	0	103	45	125			
Benzo[g,h,i]perylene		1.53	0.0266	1.340	0	114	38	126			
Benzo[k]fluoranthene		1.36	0.0266	1.340	0	101	45	125			
Benzyl alcohol		1.24	0.0660	1.340	0	92.5	25	125			
Bis(2-chloroethoxy)methane		0.953	0.0266	1.340	0	71.1	43	125			
Bis(2-chloroethyl)ether		1.20	0.0266	1.340	0	89.4	38	125			
Bis(2-chloroisopropyl)ether		0.658	0.0266	1.340	0	49.1	25	125			
Bis(2-ethylhexyl)phthalate		1.12	0.0660	1.340	0	83.6	47	127			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 20 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_190510B

Sample ID	LCS-90823	Batch ID:	90823	TestNo:	SW8270D		Units:	mg/Kg			
SampType:	LCS	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 1:22:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Butyl benzyl phthalate		1.30	0.0660	1.340	0	97.1	49	125			
Carbazole		1.16	0.0266	1.340	0	86.6	40	125			
Chrysene		1.26	0.0266	1.340	0	94.2	53	125			
Dibenz[a,h]anthracene		1.42	0.0266	1.340	0	106	41	125			
Dibenzo-furan		1.16	0.0266	1.340	0	86.6	51	125			
Diethyl phthalate		1.39	0.0660	1.340	0	104	50	125			
Dimethyl phthalate		1.41	0.0660	1.340	0	105	49	125			
Di-n-butyl phthalate		1.16	0.0660	1.340	0	86.6	56	125			
Di-n-octyl phthalate		1.16	0.0660	1.340	0	86.7	41	132			
Fluoranthene		1.22	0.0266	1.340	0	91.4	54	125			
Fluorene		1.28	0.0266	1.340	0	95.8	49	125			
Hexachlorobenzene		1.61	0.0266	1.340	0	120	47	125			
Hexachlorobutadiene		1.21	0.0266	1.340	0	90.4	40	125			
Hexachlorocyclopentadiene		1.07	0.0660	1.340	0	79.5	31	135			
Hexachloroethane		0.977	0.0266	1.340	0	72.9	34	125			
Indeno[1,2,3-cd]pyrene		1.35	0.0266	1.340	0	101	38	125			
Isophorone		0.879	0.0660	1.340	0	65.6	43	125			
Naphthalene		0.925	0.0266	1.340	0	69.0	40	125			
Nitrobenzene		0.881	0.0266	1.340	0	65.8	41	125			
N-Nitrosodiethylamine		1.01	0.0266	1.340	0	75.4	38	125			
N-Nitrosodi-n-propylamine		0.943	0.0266	1.340	0	70.4	40	125			
N-Nitrosodiphenylamine		1.34	0.0266	1.340	0	100	49	125			
Pentachlorophenol		1.38	0.0266	1.340	0	103	25	125			
Phenanthrene		1.23	0.0266	1.340	0	92.1	50	125			
Phenol		0.904	0.0266	1.340	0	67.5	39	125			
Pyrene		1.46	0.0266	1.340	0	109	46	125			
Pyridine		0.725	0.132	1.340	0	54.1	20	125			
Surr: 2,4,6-Tribromophenol		0.787		0.6670		118	45	126			
Surr: 2-Fluorobiphenyl		0.520		0.6670		78.0	60	125			
Surr: 2-Fluorophenol		0.507		0.6670		76.0	37	125			
Surr: 4-Terphenyl-d14		0.793		0.6670		119	45	125			
Surr: Nitrobenzene-d5		0.420		0.6670		63.0	45	125			
Surr: Phenol-d5		0.453		0.6670		68.0	40	125			

Sample ID	1905049-05CMS	Batch ID:	90823	TestNo:	SW8270D		Units:	mg/Kg-dry			
SampType:	MS	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 6:51:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene		1.24	0.0302	1.523	0	81.3	44	125			
1,2-Dichlorobenzene		1.13	0.0302	1.523	0	74.5	45	125			
1,3-Dichlorobenzene		1.06	0.0302	1.523	0	69.6	39	125			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 21 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_190510B

Sample ID	1905049-05CMS	Batch ID:	90823	TestNo:	SW8270D		Units:	mg/Kg-dry			
SampType:	MS	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 6:51:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		1.26	0.0302	1.523	0	82.7	35	125			
2,4,5-Trichlorophenol		1.45	0.0302	1.523	0.01762	93.7	49	125			
2,4,6-Trichlorophenol		1.51	0.0302	1.523	0.01689	97.7	43	125			
2,4-Dichlorophenol		1.22	0.0302	1.523	0.01468	79.1	45	125			
2,4-Dimethylphenol		0.812	0.0302	1.523	0	53.3	32	125			
2,4-Dinitrophenol		1.64	0.150	1.523	0	107	25	132			
2,4-Dinitrotoluene		1.65	0.0302	1.523	0.02129	107	48	125			
2,6-Dichlorophenol		1.36	0.0302	1.523	0	89.2	38	125			
2,6-Dinitrotoluene		1.51	0.0302	1.523	0.03745	96.4	48	125			
2-Chloronaphthalene		1.29	0.0302	1.523	0	84.6	45	125			
2-Chlorophenol		1.18	0.0302	1.523	0	77.2	44	125			
2-Methylnaphthalene		1.38	0.0302	1.523	0	90.6	47	125			
2-Methylphenol		0.842	0.0302	1.523	0	55.3	40	125			
2-Nitroaniline		0.0205	0.0302	1.523	0.02056	-0.00622	44	125			S
2-Nitrophenol		1.21	0.0302	1.523	0.01689	78.4	42	125			
3,3'-Dichlorobenzidine		0.0205	0.0302	1.523	0.01982	0.0420	25	128			S
3-Nitroaniline		0.0273	0.0302	1.523	0.02643	0.0560	27	125			S
4,6-Dinitro-2-methylphenol		1.24	0.0750	1.523	0.05507	78.0	29	137			
4-Bromophenyl phenyl ether		1.62	0.0302	1.523	0	106	46	125			
4-Chloro-3-methylphenol		0.643	0.0302	1.523	0.01468	41.3	46	125			S
4-Chloroaniline		<0.0341	0.0750	1.523	0	0	34	125			S
4-Chlorophenyl phenyl ether		1.71	0.0302	1.523	0	112	47	125			
4-Methylphenol		0.795	0.0302	1.523	0	52.2	41	125			
4-Nitroaniline		0.0500	0.0302	1.523	0.02496	1.64	34	125			S
4-Nitrophenol		0.226	0.150	1.523	0	14.8	25	138			S
Acenaphthene		1.21	0.0302	1.523	0.01468	78.7	46	125			
Acenaphthylene		0.921	0.0302	1.523	0.01248	59.6	44	125			
Aniline		0.674	0.150	1.523	0	44.2	20	125			
Anthracene		1.41	0.0302	1.523	0.08958	86.8	53	125			
Benzo[a]anthracene		3.21	0.0302	1.523	2.050	75.9	52	125			
Benzo[a]pyrene		4.19	0.0302	1.523	2.971	80.3	50	125			
Benzo[b]fluoranthene		6.91	0.0302	1.523	4.789	139	45	125			S
Benzo[g,h,i]perylene		3.11	0.0302	1.523	2.480	41.3	38	126			
Benzo[k]fluoranthene		2.13	0.0302	1.523	1.200	61.3	45	125			
Benzyl alcohol		<0.0341	0.0750	1.523	0	0	25	125			S
Bis(2-chloroethoxy)methane		<0.0114	0.0302	1.523	0	0	43	125			S
Bis(2-chloroethyl)ether		0.860	0.0302	1.523	0.01175	55.7	38	125			
Bis(2-chloroisopropyl)ether		0.716	0.0302	1.523	0.1278	38.6	25	125			
Bis(2-ethylhexyl)phthalate		1.29	0.0750	1.523	0.03745	82.4	47	127			
Butyl benzyl phthalate		1.41	0.0750	1.523	0	92.7	49	125			
Carbazole		0.713	0.0302	1.523	0.03818	44.3	40	125			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 22 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_190510B

Sample ID	1905049-05CMS	Batch ID:	90823	TestNo:	SW8270D	Units:	mg/Kg-dry				
SampType:	MS	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 6:51:00 PM		Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chrysene		3.09	0.0302	1.523	2.378	46.4	53	125			S
Dibenz[a,h]anthracene		1.75	0.0302	1.523	0.1769	103	41	125			
Dibenzofuran		1.42	0.0302	1.523	0	93.0	51	125			
Diethyl phthalate		1.67	0.0750	1.523	0	109	50	125			
Dimethyl phthalate		1.68	0.0750	1.523	0	110	49	125			
Di-n-butyl phthalate		3.22	0.0750	1.523	1.213	132	56	125			S
Di-n-octyl phthalate		1.62	0.0750	1.523	0	106	41	132			
Fluoranthene		2.95	0.0302	1.523	1.855	71.7	54	125			
Fluorene		1.55	0.0302	1.523	0.01395	101	49	125			
Hexachlorobenzene		1.63	0.0302	1.523	0	107	47	125			
Hexachlorobutadiene		1.38	0.0302	1.523	0	90.8	40	125			
Hexachlorocyclopentadiene		1.31	0.0750	1.523	0	85.9	31	135			
Hexachloroethane		1.05	0.0302	1.523	0	68.8	34	125			
Indeno[1,2,3-cd]pyrene		2.59	0.0302	1.523	1.802	52.0	38	125			
Isophorone		0.691	0.0750	1.523	0	45.4	43	125			
Naphthalene		1.03	0.0302	1.523	0	67.6	40	125			
Nitrobenzene		1.04	0.0302	1.523	0	68.2	41	125			
N-Nitrosodiethylamine		<0.0114	0.0302	1.523	0	0	38	125			S
N-Nitrosodi-n-propylamine		<0.0114	0.0302	1.523	0.03524	-2.31	40	125			S
N-Nitrosodiphenylamine		0.0970	0.0302	1.523	0	6.37	49	125			S
Pentachlorophenol		1.52	0.0302	1.523	0.02056	98.2	25	125			
Phenanthrene		1.68	0.0302	1.523	0.4684	79.5	50	125			
Phenol		0.897	0.0302	1.523	0.05213	55.5	39	125			
Pyrene		3.08	0.0302	1.523	1.820	82.4	46	125			
Pyridine		<0.0568	0.150	1.523	0	0	20	125			S
Surr: 2,4,6-Tribromophenol		0.834		0.7583		110	45	126			
Surr: 2-Fluorobiphenyl		0.629		0.7583		83.0	60	125			
Surr: 2-Fluorophenol		0.561		0.7583		74.0	37	125			
Surr: 4-Terphenyl-d14		0.879		0.7583		116	45	125			
Surr: Nitrobenzene-d5		0.470		0.7583		62.0	45	125			
Surr: Phenol-d5		0.424		0.7583		56.0	40	125			

Sample ID	1905049-05CMSD	Batch ID:	90823	TestNo:	SW8270D	Units:	mg/Kg-dry				
SampType:	MSD	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 7:16:00 PM		Prep Date:	5/10/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trichlorobenzene		1.20	0.0303	1.526	0	78.8	44	125	3.03	30	
1,2-Dichlorobenzene		1.06	0.0303	1.526	0	69.3	45	125	7.00	30	
1,3-Dichlorobenzene		0.994	0.0303	1.526	0	65.1	39	125	6.38	30	
1,4-Dichlorobenzene		1.16	0.0303	1.526	0	76.2	35	125	7.94	30	
2,4,5-Trichlorophenol		1.52	0.0303	1.526	0.01762	98.4	49	125	5.06	30	

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 23 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_190510B

Sample ID	1905049-05CMSD	Batch ID:	90823	TestNo:	SW8270D		Units:	mg/Kg-dry			
SampType:	MSD	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 7:16:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,4,6-Trichlorophenol		1.46	0.0303	1.526	0.01689	94.3	43	125	3.29	30	
2,4-Dichlorophenol		1.21	0.0303	1.526	0.01468	78.2	45	125	0.864	30	
2,4-Dimethylphenol		0.891	0.0303	1.526	0	58.4	32	125	9.20	30	
2,4-Dinitrophenol		1.39	0.150	1.526	0	91.1	25	132	16.2	30	
2,4-Dinitrotoluene		1.62	0.0303	1.526	0.02129	104	48	125	2.03	30	
2,6-Dichlorophenol		1.34	0.0303	1.526	0	87.5	38	125	1.77	30	
2,6-Dinitrotoluene		1.49	0.0303	1.526	0.03745	95.0	48	125	1.27	30	
2-Chloronaphthalene		1.24	0.0303	1.526	0	81.3	45	125	3.82	30	
2-Chlorophenol		1.06	0.0303	1.526	0	69.5	44	125	10.3	30	
2-Methylnaphthalene		1.36	0.0303	1.526	0	88.8	47	125	1.80	30	
2-Methylphenol		0.793	0.0303	1.526	0	51.9	40	125	6.02	30	
2-Nitroaniline		0.0213	0.0303	1.526	0.02056	0.0462	44	125	3.83	30	S
2-Nitrophenol		1.25	0.0303	1.526	0.01689	80.5	42	125	2.73	30	
3,3'-Dichlorobenzidine		0.0182	0.0303	1.526	0.01982	-0.105	25	128	11.6	30	S
3-Nitroaniline		0.0281	0.0303	1.526	0.02643	0.109	27	125	2.94	30	S
4,6-Dinitro-2-methylphenol		1.09	0.0752	1.526	0.05507	67.9	29	137	12.9	30	
4-Bromophenyl phenyl ether		1.62	0.0303	1.526	0	106	46	125	0.083	30	
4-Chloro-3-methylphenol		0.658	0.0303	1.526	0.01468	42.1	46	125	2.18	30	S
4-Chloroaniline		<0.0342	0.0752	1.526	0	0	34	125	0	30	S
4-Chlorophenyl phenyl ether		1.61	0.0303	1.526	0	106	47	125	5.74	30	
4-Methylphenol		0.784	0.0303	1.526	0	51.3	41	125	1.44	30	
4-Nitroaniline		0.0273	0.0303	1.526	0.02496	0.156	34	125	58.6	30	SR
4-Nitrophenol		0.213	0.150	1.526	0	14.0	25	138	5.67	30	S
Acenaphthene		1.20	0.0303	1.526	0.01468	77.3	46	125	1.50	30	
Acenaphthylene		1.33	0.0303	1.526	0.01248	86.4	44	125	36.4	30	R
Aniline		0.623	0.150	1.526	0	40.8	20	125	7.76	30	
Anthracene		1.45	0.0303	1.526	0.08958	89.4	53	125	2.95	30	
Benzo[a]anthracene		3.76	0.0303	1.526	2.050	112	52	125	15.8	30	
Benzo[a]pyrene		5.12	0.0303	1.526	2.971	141	50	125	19.9	30	S
Benzo[b]fluoranthene		8.49	0.0303	1.526	4.789	243	45	125	20.5	30	S
Benzo[g,h,i]perylene		3.92	0.0303	1.526	2.480	94.4	38	126	23.1	30	
Benzo[k]fluoranthene		1.67	0.0303	1.526	1.200	30.6	45	125	24.6	30	S
Benzyl alcohol		<0.0342	0.0752	1.526	0	0	25	125	0	30	S
Bis(2-chloroethoxy)methane		0.853	0.0303	1.526	0	55.9	43	125	200	30	R
Bis(2-chloroethyl)ether		0.799	0.0303	1.526	0.01175	51.6	38	125	7.39	30	
Bis(2-chloroisopropyl)ether		0.659	0.0303	1.526	0.1278	34.8	25	125	8.30	30	
Bis(2-ethylhexyl)phthalate		1.26	0.0752	1.526	0.03745	80.0	47	127	2.66	30	
Butyl benzyl phthalate		1.37	0.0752	1.526	0	89.7	49	125	3.13	30	
Carbazole		1.13	0.0303	1.526	0.03818	71.7	40	125	45.4	30	R
Chrysene		3.50	0.0303	1.526	2.378	73.8	53	125	12.7	30	
Dibenz[a,h]anthracene		2.02	0.0303	1.526	0.1769	121	41	125	14.4	30	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 24 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS4_190510B

Sample ID	1905049-05CMSD	Batch ID:	90823	TestNo:	SW8270D		Units:	mg/Kg-dry			
SampType:	MSD	Run ID:	GCMS4_190510B	Analysis Date: 5/10/2019 7:16:00 PM			Prep Date:	5/10/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dibenzofuran		1.37	0.0303	1.526	0	89.7	51	125	3.51	30	
Diethyl phthalate		1.62	0.0752	1.526	0	106	50	125	2.80	30	
Dimethyl phthalate		1.63	0.0752	1.526	0	107	49	125	2.64	30	
Di-n-butyl phthalate		2.57	0.0752	1.526	1.213	88.9	56	125	22.4	30	
Di-n-octyl phthalate		1.60	0.0752	1.526	0	105	41	132	1.31	30	
Fluoranthene		3.36	0.0303	1.526	1.855	98.4	54	125	13.0	30	
Fluorene		1.53	0.0303	1.526	0.01395	99.2	49	125	1.53	30	
Hexachlorobenzene		1.65	0.0303	1.526	0	108	47	125	1.26	30	
Hexachlorobutadiene		1.37	0.0303	1.526	0	89.8	40	125	0.904	30	
Hexachlorocyclopentadiene		1.17	0.0752	1.526	0	76.8	31	135	11.0	30	
Hexachloroethane		0.970	0.0303	1.526	0	63.5	34	125	7.70	30	
Indeno[1,2,3-cd]pyrene		3.19	0.0303	1.526	1.802	91.2	38	125	20.7	30	
Isophorone		0.947	0.0752	1.526	0	62.0	43	125	31.2	30	R
Naphthalene		1.00	0.0303	1.526	0	65.8	40	125	2.49	30	
Nitrobenzene		0.963	0.0303	1.526	0	63.1	41	125	7.61	30	
N-Nitrosodiethylamine		0.227	0.0303	1.526	0	14.9	38	125	200	30	SR
N-Nitrosodi-n-propylamine		0.752	0.0303	1.526	0.03524	46.9	40	125	200	30	R
N-Nitrosodiphenylamine		0.608	0.0303	1.526	0	39.9	49	125	145	30	SR
Pentachlorophenol		1.46	0.0303	1.526	0.02056	94.0	25	125	4.14	30	
Phenanthrene		1.77	0.0303	1.526	0.4684	85.2	50	125	5.12	30	
Phenol		0.0357	0.0303	1.526	0.05213	-1.08	39	125	185	30	SR
Pyrene		3.46	0.0303	1.526	1.820	107	46	125	11.7	30	
Pyridine		<0.0570	0.150	1.526	0	0	20	125	0	30	S
Surr: 2,4,6-Tribromophenol		0.805		0.7598		106	45	126	0	0	
Surr: 2-Fluorobiphenyl		0.570		0.7598		75.0	60	125	0	0	
Surr: 2-Fluorophenol		0.471		0.7598		62.0	37	125	0	0	
Surr: 4-Terphenyl-d14		0.828		0.7598		109	45	125	0	0	
Surr: Nitrobenzene-d5		0.418		0.7598		55.0	45	125	0	0	
Surr: Phenol-d5		0.365		0.7598		48.0	40	125	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 25 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190514A

The QC data in batch 90823 applies to the following samples: 1905098-10B, 1905098-15B, 1905098-16B

Sample ID	SB-190514	Batch ID:	90823	TestNo:	SW8270D	Units:	mg/Kg
SampType:	SBLK	Run ID:	GCMS9_190514A	Analysis Date: 5/14/2019 12:23:00 PM Prep Date:			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit HighLimit %RPD RPDLimit Qual
1,2,4-Trichlorobenzene		<0.0100	0.0266	0			
1,2-Dichlorobenzene		<0.0100	0.0266	0			
1,3-Dichlorobenzene		<0.0100	0.0266	0			
1,4-Dichlorobenzene		<0.0100	0.0266	0			
2,4,5-Trichlorophenol		<0.0100	0.0266	0			
2,4,6-Trichlorophenol		<0.0100	0.0266	0			
2,4-Dichlorophenol		<0.0100	0.0266	0			
2,4-Dimethylphenol		<0.0100	0.0266	0			
2,4-Dinitrophenol		<0.0500	0.132	0			
2,4-Dinitrotoluene		<0.0100	0.0266	0			
2,6-Dichlorophenol		<0.0100	0.0266	0			
2,6-Dinitrotoluene		<0.0100	0.0266	0			
2-Chloronaphthalene		<0.0100	0.0266	0			
2-Chlorophenol		<0.0100	0.0266	0			
2-Methylnaphthalene		<0.0100	0.0266	0			
2-Methylphenol		<0.0100	0.0266	0			
2-Nitroaniline		<0.0100	0.0266	0			
2-Nitrophenol		<0.0100	0.0266	0			
3,3'-Dichlorobenzidine		<0.0100	0.0266	0			
3-Nitroaniline		<0.0100	0.0266	0			
4,6-Dinitro-2-methylphenol		<0.0300	0.0660	0			
4-Bromophenyl phenyl ether		<0.0100	0.0266	0			
4-Chloro-3-methylphenol		<0.0100	0.0266	0			
4-Chloroaniline		<0.0300	0.0660	0			
4-Chlorophenyl phenyl ether		<0.0100	0.0266	0			
4-Methylphenol		<0.0200	0.0266	0			
4-Nitroaniline		<0.0100	0.0266	0			
4-Nitrophenol		<0.0500	0.132	0			
Acenaphthene		<0.0100	0.0266	0			
Acenaphthylene		<0.0100	0.0266	0			
Aniline		<0.0660	0.132	0			
Anthracene		<0.0100	0.0266	0			
Benzo[a]anthracene		<0.0100	0.0266	0			
Benzo[a]pyrene		<0.0100	0.0266	0			
Benzo[b]fluoranthene		<0.0100	0.0266	0			
Benzo[g,h,i]perylene		<0.0100	0.0266	0			
Benzo[k]fluoranthene		<0.0100	0.0266	0			
Benzyl alcohol		<0.0300	0.0660	0			
Bis(2-chloroethoxy)methane		<0.0100	0.0266	0			
Bis(2-chloroethyl)ether		<0.0100	0.0266	0			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 26 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190514A

Sample ID	SB-190514	Batch ID:	90823	TestNo:	SW8270D	Units:	mg/Kg				
SampType:	SBLK	Run ID:	GCMS9_190514A	Analysis Date: 5/14/2019 12:23:00 PM		Prep Date:					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bis(2-chloroisopropyl)ether		<0.0100	0.0266	0							
Bis(2-ethylhexyl)phthalate		<0.0300	0.0660	0							
Butyl benzyl phthalate		<0.0400	0.0660	0							
Carbazole		<0.0100	0.0266	0							
Chrysene		<0.0100	0.0266	0							
Dibenz[a,h]anthracene		<0.0100	0.0266	0							
Dibenzofuran		<0.0100	0.0266	0							
Diethyl phthalate		<0.0400	0.0660	0							
Dimethyl phthalate		<0.0400	0.0660	0							
Di-n-butyl phthalate		<0.0400	0.0660	0							
Di-n-octyl phthalate		<0.0400	0.0660	0							
Fluoranthene		<0.0100	0.0266	0							
Fluorene		<0.0100	0.0266	0							
Hexachlorobenzene		<0.0100	0.0266	0							
Hexachlorobutadiene		<0.0100	0.0266	0							
Hexachlorocyclopentadiene		<0.0300	0.0660	0							
Hexachloroethane		<0.0100	0.0266	0							
Indeno[1,2,3-cd]pyrene		<0.0100	0.0266	0							
Isophorone		<0.0300	0.0660	0							
Naphthalene		<0.0100	0.0266	0							
Nitrobenzene		<0.0100	0.0266	0							
N-Nitrosodiethylamine		<0.0100	0.0266	0							
N-Nitrosodi-n-propylamine		<0.0100	0.0266	0							
N-Nitrosodiphenylamine		<0.0100	0.0266	0							
Pentachlorophenol		<0.0100	0.0266	0							
Phenanthrene		<0.0100	0.0266	0							
Phenol		<0.0100	0.0266	0							
Pyrene		<0.0100	0.0266	0							
Pyridine		<0.0500	0.132	0							

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 27 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190515A

The QC data in batch 90877 applies to the following samples: 1905098-01B, 1905098-02B, 1905098-03B, 1905098-04B, 1905098-05B, 1905098-06B, 1905098-07B, 1905098-08B

Sample ID	LCS-90877	Batch ID:	90877	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	LCS	Run ID:	GCMS9_190515A	Analysis Date: 5/15/2019 3:35:00 PM		Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		0.0290	0.00400	0.04000	0	72.6	30	125			
2,4,5-Trichlorophenol		0.0330	0.00400	0.04000	0	82.6	49	120			
2,4,6-Trichlorophenol		0.0323	0.00400	0.04000	0	80.8	49	126			
2,4-Dinitrotoluene		0.0335	0.00400	0.04000	0	83.9	51	120			
2-Methylphenol		0.0290	0.00400	0.04000	0	72.6	38	120			
3&4-Methylphenol		0.0279	0.00400	0.04000	0	69.6	32	120			
Hexachlorobenzene		0.0361	0.00400	0.04000	0	90.3	52	120			
Hexachlorobutadiene		0.0297	0.00400	0.04000	0	74.2	27	120			
Hexachloroethane		0.0309	0.00400	0.04000	0	77.3	28	120			
Nitrobenzene		0.0336	0.00400	0.04000	0	83.9	44	120			
Pentachlorophenol		0.0336	0.00400	0.04000	0	84.1	38	120			
Pyridine		0.0130	0.0100	0.04000	0	32.4	20	120			
Surr: 2,4,6-Tribromophenol		0.0730		0.08000		91.2	42	124			
Surr: 2-Fluorobiphenyl		0.0588		0.08000		73.5	48	120			
Surr: 2-Fluorophenol		0.0466		0.08000		58.2	20	120			
Surr: 4-Terphenyl-d14		0.0634		0.08000		79.2	51	135			
Surr: Nitrobenzene-d5		0.0664		0.08000		83.0	41	120			
Surr: Phenol-d5		0.0374		0.08000		46.8	20	120			

Sample ID	MB-90877	Batch ID:	90877	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS9_190515A	Analysis Date: 5/15/2019 4:42:00 PM		Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		<0.00100	0.00400								
2,4,5-Trichlorophenol		<0.00100	0.00400								
2,4,6-Trichlorophenol		<0.00100	0.00400								
2,4-Dinitrotoluene		<0.00100	0.00400								
2-Methylphenol		<0.00100	0.00400								
3&4-Methylphenol		<0.00100	0.00400								
Hexachlorobenzene		<0.00100	0.00400								
Hexachlorobutadiene		<0.00100	0.00400								
Hexachloroethane		<0.00100	0.00400								
Nitrobenzene		<0.00200	0.00400								
Pentachlorophenol		<0.00200	0.00400								
Pyridine		<0.00400	0.0100								
Surr: 2,4,6-Tribromophenol		0.0738		0.08000		92.2	42	124			
Surr: 2-Fluorobiphenyl		0.0630		0.08000		78.8	48	120			
Surr: 2-Fluorophenol		0.0412		0.08000		51.5	20	120			
Surr: 4-Terphenyl-d14		0.0690		0.08000		86.2	51	135			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 28 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190515A

Sample ID	MB-90877	Batch ID:	90877	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS9_190515A	Analysis Date: 5/15/2019 4:42:00 PM		Prep Date: 5/14/2019					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5		0.0704		0.08000		88.0	41	120			
Surr: Phenol-d5		0.0292		0.08000		36.5	20	120			

Sample ID	MB-90869-TCLP	Batch ID:	90877	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS9_190515A	Analysis Date: 5/15/2019 5:05:00 PM		Prep Date: 5/14/2019					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		<0.00935	0.0374								
2,4,5-Trichlorophenol		<0.00935	0.0374								
2,4,6-Trichlorophenol		<0.00935	0.0374								
2,4-Dinitrotoluene		<0.00935	0.0374								
2-Methylphenol		<0.00935	0.0374								
3&4-Methylphenol		<0.00935	0.0374								
Hexachlorobenzene		<0.00935	0.0374								
Hexachlorobutadiene		<0.00935	0.0374								
Hexachloroethane		<0.00935	0.0374								
Nitrobenzene		<0.0187	0.0374								
Pentachlorophenol		<0.0187	0.0374								
Pyridine		<0.0374	0.0935								
Surr: 2,4,6-Tribromophenol		0.688		0.7477		92.0	42	124			
Surr: 2-Fluorobiphenyl		0.572		0.7477		76.5	48	120			
Surr: 2-Fluorophenol		0.561		0.7477		75.0	20	120			
Surr: 4-Terphenyl-d14		0.622		0.7477		83.3	51	135			
Surr: Nitrobenzene-d5		0.664		0.7477		88.8	41	120			
Surr: Phenol-d5		0.574		0.7477		76.8	20	120			

Sample ID	1905147-01AMS	Batch ID:	90877	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MS	Run ID:	GCMS9_190515A	Analysis Date: 5/15/2019 10:19:00 PM		Prep Date: 5/14/2019					
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		0.306	0.0385	0.3854	0	79.4	30	125			
2,4,5-Trichlorophenol		0.340	0.0385	0.3854	0	88.2	49	120			
2,4,6-Trichlorophenol		0.337	0.0385	0.3854	0	87.4	49	126			
2,4-Dinitrotoluene		0.323	0.0385	0.3854	0	83.9	51	120			
2-Methylphenol		0.320	0.0385	0.3854	0	83.1	38	120			
3&4-Methylphenol		0.316	0.0385	0.3854	0	82.1	32	120			
Hexachlorobenzene		0.365	0.0385	0.3854	0	94.8	52	120			
Hexachlorobutadiene		0.327	0.0385	0.3854	0	84.9	27	120			
Hexachloroethane		0.336	0.0385	0.3854	0	87.2	28	120			
Nitrobenzene		0.345	0.0385	0.3854	0	89.7	44	120			
Pentachlorophenol		0.0759	0.0385	0.3854	0	19.7	38	120			S

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 29 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190515A

Sample ID	1905147-01AMS	Batch ID:	90877	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MS	Run ID:	GCMS9_190515A	Analysis Date: 5/15/2019 10:19:00 PM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Pyridine		0.254	0.0963	0.3854	0	65.8	20	120			
Surr: 2,4,6-Tribromophenol		0.750		0.7707		97.2	42	124			
Surr: 2-Fluorobiphenyl		0.599		0.7707		77.8	48	120			
Surr: 2-Fluorophenol		0.574		0.7707		74.5	20	120			
Surr: 4-Terphenyl-d14		0.645		0.7707		83.8	51	135			
Surr: Nitrobenzene-d5		0.688		0.7707		89.3	41	120			
Surr: Phenol-d5		0.605		0.7707		78.5	20	120			

Sample ID	1905147-01AMSD	Batch ID:	90877	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MSD	Run ID:	GCMS9_190515A	Analysis Date: 5/15/2019 10:42:00 PM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		0.293	0.0380	0.3802	0	77.1	30	125	4.28	20	
2,4,5-Trichlorophenol		0.334	0.0380	0.3802	0	87.8	49	120	1.74	20	
2,4,6-Trichlorophenol		0.332	0.0380	0.3802	0	87.4	49	126	1.34	20	
2,4-Dinitrotoluene		0.315	0.0380	0.3802	0	82.8	51	120	2.66	20	
2-Methylphenol		0.312	0.0380	0.3802	0	82.0	38	120	2.73	20	
3&4-Methylphenol		0.308	0.0380	0.3802	0	81.0	32	120	2.69	20	
Hexachlorobenzene		0.360	0.0380	0.3802	0	94.8	52	120	1.34	20	
Hexachlorobutadiene		0.312	0.0380	0.3802	0	82.0	27	120	4.88	20	
Hexachloroethane		0.320	0.0380	0.3802	0	84.2	28	120	4.90	20	
Nitrobenzene		0.341	0.0380	0.3802	0	89.8	44	120	1.17	20	
Pentachlorophenol		0.102	0.0380	0.3802	0	26.8	38	120	29.0	20	SR
Pyridine		0.253	0.0951	0.3802	0	66.6	20	120	0.207	20	
Surr: 2,4,6-Tribromophenol		0.730		0.7605		96.0	42	124	0	0	
Surr: 2-Fluorobiphenyl		0.586		0.7605		77.0	48	120	0	0	
Surr: 2-Fluorophenol		0.561		0.7605		73.8	20	120	0	0	
Surr: 4-Terphenyl-d14		0.637		0.7605		83.8	51	135	0	0	
Surr: Nitrobenzene-d5		0.681		0.7605		89.5	41	120	0	0	
Surr: Phenol-d5		0.595		0.7605		78.3	20	120	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 30 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190516A

The QC data in batch 90922 applies to the following samples: 1905098-09B, 1905098-11B, 1905098-12B, 1905098-13B, 1905098-14B, 1905098-17B

Sample ID	LCS-90922	Batch ID:	90922	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	LCS	Run ID:	GCMS9_190516A	Analysis Date: 5/16/2019 12:11:00 PM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		0.304	0.0400	0.4000	0	76.1	30	125			
2,4,5-Trichlorophenol		0.348	0.0400	0.4000	0	87.0	49	120			
2,4,6-Trichlorophenol		0.344	0.0400	0.4000	0	86.1	49	126			
2,4-Dinitrotoluene		0.345	0.0400	0.4000	0	86.2	51	120			
2-Methylphenol		0.308	0.0400	0.4000	0	77.0	38	120			
3&4-Methylphenol		0.317	0.0400	0.4000	0	79.2	32	120			
Hexachlorobenzene		0.369	0.0400	0.4000	0	92.2	52	120			
Hexachlorobutadiene		0.321	0.0400	0.4000	0	80.4	27	120			
Hexachloroethane		0.326	0.0400	0.4000	0	81.4	28	120			
Nitrobenzene		0.361	0.0400	0.4000	0	90.4	44	120			
Pentachlorophenol		0.345	0.0400	0.4000	0	86.2	38	120			
Pyridine		0.257	0.100	0.4000	0	64.2	20	120			
Surr: 2,4,6-Tribromophenol		0.758		0.8000		94.8	42	124			
Surr: 2-Fluorobiphenyl		0.620		0.8000		77.5	48	120			
Surr: 2-Fluorophenol		0.622		0.8000		77.8	20	120			
Surr: 4-Terphenyl-d14		0.660		0.8000		82.5	51	135			
Surr: Nitrobenzene-d5		0.718		0.8000		89.8	41	120			
Surr: Phenol-d5		0.622		0.8000		77.8	20	120			

Sample ID	1905098-11BMS	Batch ID:	90922	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MS	Run ID:	GCMS9_190516A	Analysis Date: 5/16/2019 12:33:00 PM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		0.272	0.0380	0.3802	0	71.5	30	125			
2,4,5-Trichlorophenol		0.347	0.0380	0.3802	0	91.4	49	120			
2,4,6-Trichlorophenol		0.318	0.0380	0.3802	0	83.8	49	126			
2,4-Dinitrotoluene		0.331	0.0380	0.3802	0	87.1	51	120			
2-Methylphenol		0.297	0.0380	0.3802	0	78.1	38	120			
3&4-Methylphenol		0.302	0.0380	0.3802	0	79.4	32	120			
Hexachlorobenzene		0.350	0.0380	0.3802	0	92.1	52	120			
Hexachlorobutadiene		0.285	0.0380	0.3802	0	75.0	27	120			
Hexachloroethane		0.289	0.0380	0.3802	0	76.0	28	120			
Nitrobenzene		0.335	0.0380	0.3802	0	88.1	44	120			
Pentachlorophenol		0.389	0.0380	0.3802	0	102	38	120			
Pyridine		0.235	0.0951	0.3802	0	61.9	20	120			
Surr: 2,4,6-Tribromophenol		0.770		0.7605		101	42	124			
Surr: 2-Fluorobiphenyl		0.580		0.7605		76.3	48	120			
Surr: 2-Fluorophenol		0.584		0.7605		76.8	20	120			
Surr: 4-Terphenyl-d14		0.631		0.7605		83.0	51	135			
Surr: Nitrobenzene-d5		0.673		0.7605		88.5	41	120			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

Page 31 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190516A

Sample ID	1905098-11BMS	Batch ID:	90922	TestNo:	SW1311/8270D	Units:	mg/L
SampType:	MS	Run ID:	GCMS9_190516A	Analysis Date:	5/16/2019 12:33:00 PM	Prep Date:	5/15/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Phenol-d5	0.591		0.7605		77.8	20	120			

Sample ID	1905098-11BMSD	Batch ID:	90922	TestNo:	SW1311/8270D	Units:	mg/L
SampType:	MSD	Run ID:	GCMS9_190516A	Analysis Date:	5/16/2019 12:56:00 PM	Prep Date:	5/15/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	0.279	0.0369	0.3690	0	75.5	30	125	2.52	20	
2,4,5-Trichlorophenol	0.331	0.0369	0.3690	0	89.7	49	120	4.87	20	
2,4,6-Trichlorophenol	0.306	0.0369	0.3690	0	83.0	49	126	3.84	20	
2,4-Dinitrotoluene	0.314	0.0369	0.3690	0	85.0	51	120	5.32	20	
2-Methylphenol	0.361	0.0369	0.3690	0	97.9	38	120	19.5	20	
3&4-Methylphenol	0.292	0.0369	0.3690	0	79.0	32	120	3.37	20	
Hexachlorobenzene	0.337	0.0369	0.3690	0	91.2	52	120	3.92	20	
Hexachlorobutadiene	0.302	0.0369	0.3690	0	81.8	27	120	5.75	20	
Hexachloroethane	0.306	0.0369	0.3690	0	82.8	28	120	5.63	20	
Nitrobenzene	0.324	0.0369	0.3690	0	87.7	44	120	3.45	20	
Pentachlorophenol	0.367	0.0369	0.3690	0	99.6	38	120	5.67	20	
Pyridine	0.227	0.0923	0.3690	0	61.4	20	120	3.73	20	
Surr: 2,4,6-Tribromophenol	0.731		0.7380		99.0	42	124	0	0	
Surr: 2-Fluorobiphenyl	0.563		0.7380		76.2	48	120	0	0	
Surr: 2-Fluorophenol	0.559		0.7380		75.8	20	120	0	0	
Surr: 4-Terphenyl-d14	0.596		0.7380		80.8	51	135	0	0	
Surr: Nitrobenzene-d5	0.651		0.7380		88.2	41	120	0	0	
Surr: Phenol-d5	0.566		0.7380		76.8	20	120	0	0	

Sample ID	MB-90895-TCLP	Batch ID:	90922	TestNo:	SW1311/8270D	Units:	mg/L
SampType:	MLBK	Run ID:	GCMS9_190516A	Analysis Date:	5/16/2019 1:18:00 PM	Prep Date:	5/15/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	<0.00933	0.0373								
2,4,5-Trichlorophenol	<0.00933	0.0373								
2,4,6-Trichlorophenol	<0.00933	0.0373								
2,4-Dinitrotoluene	<0.00933	0.0373								
2-Methylphenol	<0.00933	0.0373								
3&4-Methylphenol	<0.00933	0.0373								
Hexachlorobenzene	<0.00933	0.0373								
Hexachlorobutadiene	<0.00933	0.0373								
Hexachloroethane	<0.00933	0.0373								
Nitrobenzene	<0.0187	0.0373								
Pentachlorophenol	<0.0187	0.0373								
Pyridine	<0.0373	0.0933								

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_190516A

Sample ID	MB-90895-TCLP	Batch ID:	90922	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS9_190516A	Analysis Date: 5/16/2019 1:18:00 PM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 2,4,6-Tribromophenol		0.729		0.7463		97.8	42	124			
Surr: 2-Fluorobiphenyl		0.595		0.7463		79.8	48	120			
Surr: 2-Fluorophenol		0.586		0.7463		78.5	20	120			
Surr: 4-Terphenyl-d14		0.660		0.7463		88.5	51	135			
Surr: Nitrobenzene-d5		0.696		0.7463		93.3	41	120			
Surr: Phenol-d5		0.599		0.7463		80.3	20	120			
Sample ID	MB-90922	Batch ID:	90922	TestNo:	SW1311/8270D		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS9_190516A	Analysis Date: 5/16/2019 1:41:00 PM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene		<0.0100	0.0400								
2,4,5-Trichlorophenol		<0.0100	0.0400								
2,4,6-Trichlorophenol		<0.0100	0.0400								
2,4-Dinitrotoluene		<0.0100	0.0400								
2-Methylphenol		<0.0100	0.0400								
3&4-Methylphenol		<0.0100	0.0400								
Hexachlorobenzene		<0.0100	0.0400								
Hexachlorobutadiene		<0.0100	0.0400								
Hexachloroethane		<0.0100	0.0400								
Nitrobenzene		<0.0200	0.0400								
Pentachlorophenol		<0.0200	0.0400								
Pyridine		<0.0400	0.100								
Surr: 2,4,6-Tribromophenol		0.798		0.8000		99.8	42	124			
Surr: 2-Fluorobiphenyl		0.650		0.8000		81.2	48	120			
Surr: 2-Fluorophenol		0.646		0.8000		80.8	20	120			
Surr: 4-Terphenyl-d14		0.708		0.8000		88.5	51	135			
Surr: Nitrobenzene-d5		0.756		0.8000		94.5	41	120			
Surr: Phenol-d5		0.658		0.8000		82.2	20	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 33 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

The QC data in batch 90888 applies to the following samples: 1905098-10A, 1905098-15A, 1905098-16A

Sample ID	LCS-90888	Batch ID:	90888	TestNo:	SW8260C		Units:	mg/Kg			
SampType:	LCS	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 10:32:00 AM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane		0.0223	0.00500	0.0232	0	95.9	74	125			
1,1,1-Trichloroethane		0.0232	0.00500	0.0232	0	100	68	130			
1,1,2,2-Tetrachloroethane		0.0227	0.00500	0.0232	0	97.7	59	140			
1,1,2-Trichloroethane		0.0256	0.00500	0.0232	0	110	62	127			
1,1-Dichloroethane		0.0235	0.00500	0.0232	0	101	73	125			
1,1-Dichloroethene		0.0235	0.00500	0.0232	0	101	65	136			
1,1-Dichloropropene		0.0242	0.00500	0.0232	0	104	70	135			
1,2,3-Trichlorobenzene		0.0251	0.00500	0.0232	0	108	62	133			
1,2,3-Trichloropropane		0.0227	0.00500	0.0232	0	97.9	63	130			
1,2,4-Trichlorobenzene		0.0240	0.00500	0.0232	0	103	65	131			
1,2,4-Trimethylbenzene		0.0205	0.00500	0.0232	0	88.5	65	135			
1,2-Dibromo-3-chloropropane		0.0232	0.00500	0.0232	0	99.8	49	135			
1,2-Dibromoethane		0.0227	0.00500	0.0232	0	98.0	70	124			
1,2-Dichlorobenzene		0.0218	0.00500	0.0232	0	93.8	74	120			
1,2-Dichloroethane		0.0236	0.00500	0.0232	0	102	72	137			
1,2-Dichloropropane		0.0240	0.00500	0.0232	0	104	71	120			
1,3,5-Trimethylbenzene		0.0212	0.00500	0.0232	0	91.2	65	133			
1,3-Dichlorobenzene		0.0208	0.00500	0.0232	0	89.8	72	124			
1,3-Dichloropropane		0.0216	0.00500	0.0232	0	93.3	76	123			
1,4-Dichlorobenzene		0.0217	0.00500	0.0232	0	93.7	72	125			
2,2-Dichloropropane		0.0244	0.00500	0.0232	0	105	67	134			
2-Butanone		0.271	0.0150	0.232	0	117	60	135			
2-Chlorotoluene		0.0204	0.00500	0.0232	0	87.9	69	128			
2-Hexanone		0.240	0.0150	0.232	0	103	50	150			
4-Chlorotoluene		0.0207	0.00500	0.0232	0	89.4	73	126			
4-Methyl-2-pentanone		0.231	0.0150	0.232	0	99.7	60	135			
Acetone		0.294	0.0500	0.232	0	127	40	141			
Benzene		0.0244	0.00500	0.0232	0	105	75	125			
Bromobenzene		0.0218	0.00500	0.0232	0	93.9	66	121			
Bromochloromethane		0.0255	0.00500	0.0232	0	110	71	127			
Bromodichloromethane		0.0234	0.00500	0.0232	0	101	72	128			
Bromoform		0.0230	0.00500	0.0232	0	99.1	66	137			
Bromomethane		0.0286	0.00500	0.0232	0	123	45	141			
Carbon disulfide		0.0251	0.0150	0.0232	0	108	50	150			
Carbon tetrachloride		0.0246	0.00500	0.0232	0	106	67	133			
Chlorobenzene		0.0227	0.00500	0.0232	0	97.8	75	123			
Chloroethane		0.0231	0.00500	0.0232	0	99.7	41	141			
Chloroform		0.0245	0.00500	0.0232	0	106	72	124			
Chloromethane		0.0223	0.00500	0.0232	0	96.3	51	129			
cis-1,2-Dichloroethene		0.0246	0.00500	0.0232	0	106	67	125			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 34 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	LCS-90888	Batch ID:	90888	TestNo:	SW8260C		Units:	mg/Kg			
SampType:	LCS	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 10:32:00 AM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene		0.0242	0.00500	0.0232	0	104	72	126			
Dibromochloromethane		0.0213	0.00500	0.0232	0	91.6	66	130			
Dibromomethane		0.0255	0.00500	0.0232	0	110	73	128			
Dichlorodifluoromethane		0.0179	0.00500	0.0232	0	77.3	34	136			
Ethylbenzene		0.0222	0.00500	0.0232	0	95.6	75	125			
Hexachlorobutadiene		0.0248	0.00500	0.0232	0	107	53	142			
Iodomethane		0.0222	0.00500	0.0232	0	95.5	50	150			
Isopropylbenzene		0.0215	0.00500	0.0232	0	92.5	77	129			
m,p-Xylene		0.0452	0.00500	0.0464	0	97.5	80	125			
Methyl tert-butyl ether		0.0267	0.00500	0.0232	0	115	68	130			
Methylene chloride		0.0279	0.00500	0.0232	0	120	63	137			
Naphthalene		0.0245	0.0150	0.0232	0	105	51	135			
n-Butylbenzene		0.0206	0.00500	0.0232	0	88.8	65	138			
n-Propylbenzene		0.0213	0.00500	0.0232	0	91.7	63	135			
o-Xylene		0.0218	0.00500	0.0232	0	94.0	77	125			
p-Isopropyltoluene		0.0206	0.00500	0.0232	0	88.7	75	133			
sec-Butylbenzene		0.0208	0.00500	0.0232	0	89.7	63	132			
Styrene		0.0213	0.00500	0.0232	0	91.9	74	128			
tert-Butylbenzene		0.0209	0.00500	0.0232	0	90.0	65	132			
Tetrachloroethene		0.0221	0.00500	0.0232	0	95.2	67	139			
Toluene		0.0241	0.00500	0.0232	0	104	75	125			
trans-1,2-Dichloroethene		0.0246	0.00500	0.0232	0	106	66	134			
trans-1,3-Dichloropropene		0.0248	0.00500	0.0232	0	107	65	127			
Trichloroethene		0.0258	0.00500	0.0232	0	111	77	124			
Trichlorofluoromethane		0.0230	0.0150	0.0232	0	99.1	49	139			
Vinyl chloride		0.0255	0.00500	0.0232	0	110	58	126			
Surr: 1,2-Dichloroethane-d4		49.4		50.00		98.9	52	149			
Surr: 4-Bromofluorobenzene		47.4		50.00		94.8	84	118			
Surr: Dibromofluoromethane		52.3		50.00		105	65	135			
Surr: Toluene-d8		45.1		50.00		90.2	84	116			

Sample ID	MB-90888	Batch ID:	90888	TestNo:	SW8260C		Units:	mg/Kg			
SampType:	MLBK	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 11:28:00 AM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane		<0.00100	0.00500								
1,1,1-Trichloroethane		<0.00100	0.00500								
1,1,2,2-Tetrachloroethane		<0.00100	0.00500								
1,1,2-Trichloroethane		<0.00100	0.00500								
1,1-Dichloroethane		<0.00100	0.00500								
1,1-Dichloroethene		<0.00100	0.00500								

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor							
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit							
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits							
	RL	Reporting Limit	S	Spike Recovery outside control limits							
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified							

Page 35 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	MB-90888	Batch ID:	90888	TestNo:	SW8260C	Units:	mg/Kg				
SampType:	MBLK	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 11:28:00 AM		Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene		<0.00100	0.00500								
1,2,3-Trichlorobenzene		<0.00100	0.00500								
1,2,3-Trichloropropane		<0.00100	0.00500								
1,2,4-Trichlorobenzene		<0.00100	0.00500								
1,2,4-Trimethylbenzene		<0.00100	0.00500								
1,2-Dibromo-3-chloropropane		<0.00100	0.00500								
1,2-Dibromoethane		<0.00100	0.00500								
1,2-Dichlorobenzene		<0.00100	0.00500								
1,2-Dichloroethane		<0.00100	0.00500								
1,2-Dichloropropane		<0.00100	0.00500								
1,3,5-Trimethylbenzene		<0.00100	0.00500								
1,3-Dichlorobenzene		<0.00100	0.00500								
1,3-Dichloropropane		<0.00100	0.00500								
1,4-Dichlorobenzene		<0.00100	0.00500								
2,2-Dichloropropane		<0.00100	0.00500								
2-Butanone		<0.00500	0.0150								
2-Chlorotoluene		<0.00100	0.00500								
2-Hexanone		<0.00500	0.0150								
4-Chlorotoluene		<0.00100	0.00500								
4-Methyl-2-pentanone		<0.00500	0.0150								
Acetone		<0.0150	0.0500								
Benzene		<0.00100	0.00500								
Bromobenzene		<0.00100	0.00500								
Bromochloromethane		<0.00100	0.00500								
Bromodichloromethane		<0.00100	0.00500								
Bromoform		<0.00100	0.00500								
Bromomethane		<0.00100	0.00500								
Carbon disulfide		<0.00500	0.0150								
Carbon tetrachloride		<0.00100	0.00500								
Chlorobenzene		<0.00100	0.00500								
Chloroethane		<0.00100	0.00500								
Chloroform		<0.00100	0.00500								
Chloromethane		<0.00100	0.00500								
cis-1,2-Dichloroethene		<0.00100	0.00500								
cis-1,3-Dichloropropene		<0.00100	0.00500								
Dibromochloromethane		<0.00100	0.00500								
Dibromomethane		<0.00100	0.00500								
Dichlorodifluoromethane		<0.00100	0.00500								
Ethylbenzene		<0.00100	0.00500								
Hexachlorobutadiene		<0.00100	0.00500								
Iodomethane		<0.00100	0.00500								

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 36 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	MB-90888	Batch ID:	90888	TestNo:	SW8260C	Units:	mg/Kg				
SampType:	MBLK	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 11:28:00 AM		Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene		<0.00100	0.00500								
m,p-Xylene		<0.00100	0.00500								
Methyl tert-butyl ether		<0.00100	0.00500								
Methylene chloride		0.00949	0.00500								
Naphthalene		<0.00500	0.0150								
n-Butylbenzene		<0.00100	0.00500								
n-Propylbenzene		<0.00100	0.00500								
o-Xylene		<0.00100	0.00500								
p-Isopropyltoluene		<0.00100	0.00500								
sec-Butylbenzene		<0.00100	0.00500								
Styrene		<0.00100	0.00500								
tert-Butylbenzene		<0.00100	0.00500								
Tetrachloroethene		<0.00100	0.00500								
Toluene		<0.00100	0.00500								
trans-1,2-Dichloroethene		<0.00100	0.00500								
trans-1,3-Dichloropropene		<0.00100	0.00500								
Trichloroethene		<0.00100	0.00500								
Trichlorofluoromethane		<0.00500	0.0150								
Vinyl chloride		<0.00100	0.00500								
Surr: 1,2-Dichloroethane-d4		46.4		50.00		92.8	52	149			
Surr: 4-Bromofluorobenzene		47.6		50.00		95.1	84	118			
Surr: Dibromofluoromethane		50.5		50.00		101	65	135			
Surr: Toluene-d8		44.3		50.00		88.6	84	116			

Sample ID	1905155-01AMS	Batch ID:	90888	TestNo:	SW8260C	Units:	mg/Kg-dry				
SampType:	MS	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 3:13:00 PM		Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane		0.0227	0.00511	0.0237	0	95.9	74	125			
1,1,1-Trichloroethane		0.0228	0.00511	0.0237	0	96.1	68	130			
1,1,2,2-Tetrachloroethane		0.0213	0.00511	0.0237	0	89.8	59	140			
1,1,2-Trichloroethane		0.0255	0.00511	0.0237	0	107	62	127			
1,1-Dichloroethane		0.0238	0.00511	0.0237	0	100	73	125			
1,1-Dichloroethene		0.0239	0.00511	0.0237	0	101	65	136			
1,1-Dichloropropene		0.0231	0.00511	0.0237	0	97.5	70	135			
1,2,3-Trichlorobenzene		0.0218	0.00511	0.0237	0	92.0	62	133			
1,2,3-Trichloropropane		0.0217	0.00511	0.0237	0	91.7	63	130			
1,2,4-Trichlorobenzene		0.0215	0.00511	0.0237	0	90.7	65	131			
1,2,4-Trimethylbenzene		0.0201	0.00511	0.0237	0	84.8	65	135			
1,2-Dibromo-3-chloropropane		0.0205	0.00511	0.0237	0	86.2	49	135			
1,2-Dibromoethane		0.0230	0.00511	0.0237	0	97.1	70	124			

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
	RL	Reporting Limit	S	Spike Recovery outside control limits
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	1905155-01AMS	Batch ID:	90888	TestNo:	SW8260C	Units:	mg/Kg-dry				
SampType:	MS	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 3:13:00 PM		Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichlorobenzene		0.0218	0.00511	0.0237	0	91.9	74	120			
1,2-Dichloroethane		0.0235	0.00511	0.0237	0	99.2	72	137			
1,2-Dichloropropane		0.0248	0.00511	0.0237	0	104	71	120			
1,3,5-Trimethylbenzene		0.0207	0.00511	0.0237	0	87.3	65	133			
1,3-Dichlorobenzene		0.0208	0.00511	0.0237	0	87.8	72	124			
1,3-Dichloropropane		0.0227	0.00511	0.0237	0	95.6	76	123			
1,4-Dichlorobenzene		0.0212	0.00511	0.0237	0	89.6	72	125			
2,2-Dichloropropane		0.0225	0.00511	0.0237	0	94.7	67	134			
2-Butanone		0.260	0.0153	0.237	0	110	40	135			
2-Chlorotoluene		0.0197	0.00511	0.0237	0	82.9	69	128			
2-Hexanone		0.223	0.0153	0.237	0	94.1	50	150			
4-Chlorotoluene		0.0202	0.00511	0.0237	0	85.1	73	126			
4-Methyl-2-pentanone		0.235	0.0153	0.237	0	98.9	47	147			
Acetone		0.280	0.0511	0.237	0.0139	112	40	141			
Benzene		0.0244	0.00511	0.0237	0	103	73	126			
Bromobenzene		0.0219	0.00511	0.0237	0	92.2	66	121			
Bromoform		0.0252	0.00511	0.0237	0	106	71	127			
Bromochloromethane		0.0241	0.00511	0.0237	0	102	72	128			
Bromodichloromethane		0.0226	0.00511	0.0237	0	95.4	66	137			
Bromomethane		0.0309	0.00511	0.0237	0	130	45	141			
Carbon disulfide		0.0245	0.0153	0.0237	0	103	50	150			
Carbon tetrachloride		0.0236	0.00511	0.0237	0	99.7	67	133			
Chlorobenzene		0.0226	0.00511	0.0237	0	95.4	75	123			
Chloroethane		0.0236	0.00511	0.0237	0	99.6	41	141			
Chloroform		0.0249	0.00511	0.0237	0	105	72	124			
Chloromethane		0.0222	0.00511	0.0237	0	93.5	51	129			
cis-1,2-Dichloroethene		0.0249	0.00511	0.0237	0	105	67	125			
cis-1,3-Dichloropropene		0.0231	0.00511	0.0237	0	97.2	72	126			
Dibromochloromethane		0.0217	0.00511	0.0237	0	91.3	66	130			
Dibromomethane		0.0255	0.00511	0.0237	0	107	73	128			
Dichlorodifluoromethane		0.0177	0.00511	0.0237	0	74.7	34	136			
Ethylbenzene		0.0223	0.00511	0.0237	0	94.1	74	127			
Hexachlorobutadiene		0.0202	0.00511	0.0237	0	85.0	53	142			
Iodomethane		0.0144	0.00511	0.0237	0	60.9	50	150			
Isopropylbenzene		0.0217	0.00511	0.0237	0	91.6	77	129			
m,p-Xylene		0.0451	0.00511	0.0474	0	95.0	79	126			
Methyl tert-butyl ether		0.0271	0.00511	0.0237	0	114	50	135			
Methylene chloride		0.0269	0.00511	0.0237	0	113	63	137			
Naphthalene		0.0212	0.0153	0.0237	0	89.3	51	135			
n-Butylbenzene		0.0196	0.00511	0.0237	0	82.5	65	138			
n-Propylbenzene		0.0204	0.00511	0.0237	0	86.2	63	135			

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	1905155-01AMS	Batch ID:	90888	TestNo:	SW8260C		Units:	mg/Kg-dry			
SampType:	MS	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 3:13:00 PM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
o-Xylene		0.0231	0.00511	0.0237	0	97.2	77	125			
p-Isopropyltoluene		0.0200	0.00511	0.0237	0	84.2	75	133			
sec-Butylbenzene		0.0203	0.00511	0.0237	0	85.8	63	132			
Styrene		0.0214	0.00511	0.0237	0	90.2	74	128			
tert-Butylbenzene		0.0205	0.00511	0.0237	0	86.3	65	132			
Tetrachloroethene		0.0224	0.00511	0.0237	0	94.5	67	139			
Toluene		0.0239	0.00511	0.0237	0	101	71	127			
trans-1,2-Dichloroethene		0.0242	0.00511	0.0237	0	102	66	134			
trans-1,3-Dichloropropene		0.0234	0.00511	0.0237	0	98.5	65	127			
Trichloroethene		0.0254	0.00511	0.0237	0	107	77	124			
Trichlorofluoromethane		0.0232	0.0153	0.0237	0	97.9	49	139			
Vinyl chloride		0.0265	0.00511	0.0237	0	112	58	126			
Surr: 1,2-Dichloroethane-d4		48.7		51.12		95.3	52	149			
Surr: 4-Bromofluorobenzene		49.3		51.12		96.5	84	118			
Surr: Dibromofluoromethane		52.2		51.12		102	65	135			
Surr: Toluene-d8		48.1		51.12		94.1	84	116			

Sample ID	1905155-01AMSD	Batch ID:	90888	TestNo:	SW8260C		Units:	mg/Kg-dry			
SampType:	MSD	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 3:41:00 PM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane		0.0216	0.00490	0.0227	0	94.9	74	125	5.25	30	
1,1,1-Trichloroethane		0.0221	0.00490	0.0227	0	97.2	68	130	3.00	30	
1,1,2,2-Tetrachloroethane		0.0222	0.00490	0.0227	0	97.5	59	140	3.94	30	
1,1,2-Trichloroethane		0.0236	0.00490	0.0227	0	104	62	127	7.55	30	
1,1-Dichloroethane		0.0222	0.00490	0.0227	0	97.8	73	125	6.73	30	
1,1-Dichloroethene		0.0218	0.00490	0.0227	0	96.0	65	136	8.89	30	
1,1-Dichloropropene		0.0222	0.00490	0.0227	0	97.7	70	135	4.07	30	
1,2,3-Trichlorobenzene		0.0201	0.00490	0.0227	0	88.5	62	133	8.07	30	
1,2,3-Trichloropropane		0.0214	0.00490	0.0227	0	94.1	63	130	1.56	30	
1,2,4-Trichlorobenzene		0.0199	0.00490	0.0227	0	87.7	65	131	7.59	30	
1,2,4-Trimethylbenzene		0.0200	0.00490	0.0227	0	88.0	65	135	0.516	30	
1,2-Dibromo-3-chloropropane		0.0205	0.00490	0.0227	0	90.3	49	135	0.431	30	
1,2-Dibromoethane		0.0216	0.00490	0.0227	0	95.0	70	124	6.36	30	
1,2-Dichlorobenzene		0.0209	0.00490	0.0227	0	91.7	74	120	4.44	30	
1,2-Dichloroethane		0.0226	0.00490	0.0227	0	99.3	72	137	4.12	30	
1,2-Dichloropropane		0.0227	0.00490	0.0227	0	99.9	71	120	8.55	30	
1,3,5-Trimethylbenzene		0.0197	0.00490	0.0227	0	86.6	65	133	4.95	30	
1,3-Dichlorobenzene		0.0201	0.00490	0.0227	0	88.2	72	124	3.81	30	
1,3-Dichloropropane		0.0211	0.00490	0.0227	0	92.6	76	123	7.46	30	
1,4-Dichlorobenzene		0.0199	0.00490	0.0227	0	87.3	72	125	6.74	30	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	1905155-01AMSD	Batch ID:	90888	TestNo:	SW8260C		Units:	mg/Kg-dry			
SampType:	MSD	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 3:41:00 PM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2,2-Dichloropropane		0.0214	0.00490	0.0227	0	94.1	67	134	4.89	30	
2-Butanone		0.252	0.0147	0.227	0	111	40	135	3.14	30	
2-Chlorotoluene		0.0195	0.00490	0.0227	0	85.6	69	128	0.984	30	
2-Hexanone		0.218	0.0147	0.227	0	96.0	50	150	2.21	30	
4-Chlorotoluene		0.0197	0.00490	0.0227	0	86.7	73	126	2.35	30	
4-Methyl-2-pentanone		0.223	0.0147	0.227	0	97.9	47	147	5.25	30	
Acetone		0.261	0.0490	0.227	0.0139	109	40	141	7.16	30	
Benzene		0.0220	0.00490	0.0227	0	96.8	73	126	10.1	30	
Bromobenzene		0.0214	0.00490	0.0227	0	94.1	66	121	2.26	30	
Bromoform		0.0244	0.00490	0.0227	0	107	71	127	3.20	30	
Bromochloromethane		0.0223	0.00490	0.0227	0	98.2	72	128	7.65	30	
Bromodichloromethane		0.0220	0.00490	0.0227	0	96.7	66	137	2.86	30	
Bromoform		0.0266	0.00490	0.0227	0	117	45	141	14.7	30	
Bromomethane		0.0228	0.0147	0.0227	0	100	50	150	7.34	30	
Carbon disulfide		0.0223	0.00490	0.0227	0	97.9	67	133	5.99	30	
Carbon tetrachloride		0.0209	0.00490	0.0227	0	92.0	75	123	7.88	30	
Chlorobenzene		0.0233	0.00490	0.0227	0	96.2	41	141	7.68	30	
Chloroethane		0.0238	0.00490	0.0227	0	105	72	124	4.45	30	
Chloroform		0.0211	0.00490	0.0227	0	92.9	51	129	4.85	30	
cis-1,2-Dichloroethene		0.0221	0.00490	0.0227	0	103	67	125	6.70	30	
cis-1,3-Dichloropropene		0.0207	0.00490	0.0227	0	97.1	72	126	4.38	30	
Dibromochloromethane		0.0242	0.00490	0.0227	0	91.0	66	130	4.58	30	
Dibromomethane		0.0167	0.00490	0.0227	0	107	73	128	4.97	30	
Dichlorodifluoromethane		0.0245	0.00490	0.0227	0	73.4	34	136	5.95	30	
Ethylbenzene		0.0194	0.00490	0.0227	0	85.3	53	142	3.95	30	
Hexachlorobutadiene		0.0160	0.00490	0.0227	0	70.2	50	150	9.95	30	
Iodomethane		0.0208	0.00490	0.0227	0	91.2	77	129	4.58	30	
m,p-Xylene		0.0221	0.00490	0.0227	0	89.7	74	127	8.98	30	
Methyl tert-butyl ether		0.0184	0.00490	0.0227	0	108	50	135	9.99	30	
Methylene chloride		0.0202	0.00490	0.0227	0	110	63	137	7.53	30	
Naphthalene		0.0210	0.0147	0.0227	0	92.2	51	135	0.978	30	
n-Butylbenzene		0.0249	0.00490	0.0227	0	80.7	65	138	6.48	30	
n-Propylbenzene		0.0207	0.00490	0.0227	0	88.7	63	135	1.40	30	
o-Xylene		0.0196	0.00490	0.0227	0	95.6	77	125	5.86	30	
p-Isopropyltoluene		0.0227	0.00490	0.0227	0	83.3	75	133	5.34	30	
sec-Butylbenzene		0.0207	0.00490	0.0227	0	86.0	63	132	3.91	30	
Styrene		0.0199	0.00490	0.0227	0	91.1	74	128	3.26	30	
tert-Butylbenzene		0.0208	0.00490	0.0227	0	87.7	65	132	2.62	30	
Tetrachloroethene		0.0229	0.00490	0.0227	0	91.5	67	139	7.45	30	
Toluene		0.0229	0.00490	0.0227	0	101	71	127	4.46	30	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 40 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	1905155-01AMSD	Batch ID:	90888	TestNo:	SW8260C		Units:	mg/Kg-dry			
SampType:	MSD	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 3:41:00 PM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene		0.0221	0.00490	0.0227	0	97.1	66	134	9.10	30	
trans-1,3-Dichloropropene		0.0223	0.00490	0.0227	0	97.9	65	127	4.82	30	
Trichloroethene		0.0247	0.00490	0.0227	0	109	77	124	2.81	30	
Trichlorofluoromethane		0.0217	0.0147	0.0227	0	95.4	49	139	6.75	30	
Vinyl chloride		0.0244	0.00490	0.0227	0	107	58	126	8.02	30	
Surr: 1,2-Dichloroethane-d4		47.7		49.02		97.4	52	149	0	0	
Surr: 4-Bromofluorobenzene		48.3		49.02		98.5	84	118	0	0	
Surr: Dibromofluoromethane		51.1		49.02		104	65	135	0	0	
Surr: Toluene-d8		44.7		49.02		91.2	84	116	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 41 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

The QC data in batch 90899 applies to the following samples: 1905098-15A, 1905098-16A

Sample ID	LCS-90899 MEOH	Batch ID:	90899	TestNo:	SW8260C		Units:	mg/Kg			
SampType:	LCS	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 4:09:00 PM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane		1.11	0.250	1.16	0	95.5	74	125			
1,1,1-Trichloroethane		1.11	0.250	1.16	0	95.8	68	130			
1,1,2,2-Tetrachloroethane		1.01	0.250	1.16	0	87.3	59	140			
1,1,2-Trichloroethane		1.23	0.250	1.16	0	106	62	127			
1,1-Dichloroethane		1.13	0.250	1.16	0	97.4	73	125			
1,1-Dichloroethene		1.15	0.250	1.16	0	99.5	65	136			
1,1-Dichloropropene		1.15	0.250	1.16	0	99.3	70	135			
1,2,3-Trichlorobenzene		1.17	0.250	1.16	0	101	62	133			
1,2,3-Trichloropropane		1.01	0.250	1.16	0	87.2	63	130			
1,2,4-Trichlorobenzene		1.11	0.250	1.16	0	95.9	65	131			
1,2,4-Trimethylbenzene		1.03	0.250	1.16	0	88.4	65	135			
1,2-Dibromo-3-chloropropane		0.966	0.250	1.16	0	83.2	49	135			
1,2-Dibromoethane		1.09	0.250	1.16	0	93.9	70	124			
1,2-Dichlorobenzene		1.09	0.250	1.16	0	93.8	74	120			
1,2-Dichloroethane		1.12	0.250	1.16	0	96.9	72	137			
1,2-Dichloropropane		1.18	0.250	1.16	0	102	71	120			
1,3,5-Trimethylbenzene		1.03	0.250	1.16	0	89.0	65	133			
1,3-Dichlorobenzene		1.06	0.250	1.16	0	91.4	72	124			
1,3-Dichloropropane		1.05	0.250	1.16	0	90.5	76	123			
1,4-Dichlorobenzene		1.06	0.250	1.16	0	90.9	72	125			
2,2-Dichloropropane		1.13	0.250	1.16	0	97.3	67	134			
2-Butanone		11.8	0.750	11.6	0	101	60	135			
2-Chlorotoluene		0.998	0.250	1.16	0	86.0	69	128			
2-Hexanone		10.5	0.750	11.6	0	90.1	50	150			
4-Chlorotoluene		1.01	0.250	1.16	0	87.0	73	126			
4-Methyl-2-pentanone		10.7	0.750	11.6	0	92.0	60	135			
Acetone		12.7	2.50	11.6	0	109	40	141			
Benzene		1.19	0.250	1.16	0	102	75	125			
Bromobenzene		1.06	0.250	1.16	0	91.2	66	121			
Bromochloromethane		1.23	0.250	1.16	0	106	71	127			
Bromodichloromethane		1.14	0.250	1.16	0	98.0	72	128			
Bromoform		1.06	0.250	1.16	0	91.3	66	137			
Bromomethane		1.48	0.250	1.16	0	128	45	141			
Carbon disulfide		1.17	0.750	1.16	0	101	50	150			
Carbon tetrachloride		1.12	0.250	1.16	0	96.8	67	133			
Chlorobenzene		1.12	0.250	1.16	0	96.3	75	123			
Chloroethane		0.455	0.250	1.16	0	39.2	41	141			S
Chloroform		1.19	0.250	1.16	0	102	72	124			
Chloromethane		1.17	0.250	1.16	0	100	51	129			
cis-1,2-Dichloroethene		1.20	0.250	1.16	0	104	67	125			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 42 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	LCS-90899 MEOH	Batch ID:	90899	TestNo:	SW8260C		Units:	mg/Kg			
SampType:	LCS	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 4:09:00 PM			Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene		1.14	0.250	1.16	0	98.2	72	126			
Dibromochloromethane		1.00	0.250	1.16	0	86.3	66	130			
Dibromomethane		1.19	0.250	1.16	0	102	73	128			
Dichlorodifluoromethane		0.921	0.250	1.16	0	79.4	34	136			
Ethylbenzene		1.10	0.250	1.16	0	94.7	75	125			
Hexachlorobutadiene		1.15	0.250	1.16	0	99.5	53	142			
Iodomethane		1.00	0.250	1.16	0	86.6	50	150			
Isopropylbenzene		1.12	0.250	1.16	0	96.6	77	129			
m,p-Xylene		2.30	0.250	2.32	0	99.2	80	125			
Methyl tert-butyl ether		1.24	0.250	1.16	0	107	68	130			
Methylene chloride		1.34	0.250	1.16	0	116	63	137			
Naphthalene		1.10	0.750	1.16	0	95.2	51	135			
n-Butylbenzene		1.05	0.250	1.16	0	90.6	65	138			
n-Propylbenzene		1.03	0.250	1.16	0	89.1	63	135			
o-Xylene		1.16	0.250	1.16	0	100	77	125			
p-Isopropyltoluene		1.05	0.250	1.16	0	90.8	75	133			
sec-Butylbenzene		1.05	0.250	1.16	0	90.4	63	132			
Styrene		1.10	0.250	1.16	0	94.5	74	128			
tert-Butylbenzene		1.06	0.250	1.16	0	91.5	65	132			
Tetrachloroethene		1.10	0.250	1.16	0	95.2	67	139			
Toluene		1.24	0.250	1.16	0	107	75	125			
trans-1,2-Dichloroethene		1.21	0.250	1.16	0	105	66	134			
trans-1,3-Dichloropropene		1.15	0.250	1.16	0	99.3	65	127			
Trichloroethene		1.27	0.250	1.16	0	109	77	124			
Trichlorofluoromethane		0.910	0.750	1.16	0	78.5	49	139			
Vinyl chloride		1.32	0.250	1.16	0	114	58	126			
Surr: 1,2-Dichloroethane-d4		2280		2500		91.1	52	149			
Surr: 4-Bromofluorobenzene		2320		2500		92.6	84	118			
Surr: Dibromofluoromethane		2460		2500		98.4	65	135			
Surr: Toluene-d8		2310		2500		92.4	84	116			

Sample ID	MB-90899 MEOH	Batch ID:	90899	TestNo:	SW8260C		Units:	mg/Kg			
SampType:	MLBK	Run ID:	GCMS2_190514A	Analysis Date:	5/14/2019 5:05:00 PM		Prep Date:	5/14/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane		<0.0500	0.250								
1,1,1-Trichloroethane		<0.0500	0.250								
1,1,2,2-Tetrachloroethane		<0.0500	0.250								
1,1,2-Trichloroethane		<0.0500	0.250								
1,1-Dichloroethane		<0.0500	0.250								
1,1-Dichloroethene		<0.0500	0.250								

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor							
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit							
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits							
	RL	Reporting Limit	S	Spike Recovery outside control limits							
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified							

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	MB-90899 MEOH	Batch ID:	90899	TestNo:	SW8260C	Units:	mg/Kg				
SampType:	MBLK	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 5:05:00 PM		Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene		<0.0500	0.250								
1,2,3-Trichlorobenzene		<0.0500	0.250								
1,2,3-Trichloropropane		<0.0500	0.250								
1,2,4-Trichlorobenzene		<0.0500	0.250								
1,2,4-Trimethylbenzene		<0.0500	0.250								
1,2-Dibromo-3-chloropropane		<0.0500	0.250								
1,2-Dibromoethane		<0.0500	0.250								
1,2-Dichlorobenzene		<0.0500	0.250								
1,2-Dichloroethane		<0.0500	0.250								
1,2-Dichloropropane		<0.0500	0.250								
1,3,5-Trimethylbenzene		<0.0500	0.250								
1,3-Dichlorobenzene		<0.0500	0.250								
1,3-Dichloropropane		<0.0500	0.250								
1,4-Dichlorobenzene		<0.0500	0.250								
2,2-Dichloropropane		<0.0500	0.250								
2-Butanone		<0.250	0.750								
2-Chlorotoluene		<0.0500	0.250								
2-Hexanone		<0.250	0.750								
4-Chlorotoluene		<0.0500	0.250								
4-Methyl-2-pentanone		<0.250	0.750								
Acetone		<0.750	2.50								
Benzene		<0.0500	0.250								
Bromobenzene		<0.0500	0.250								
Bromochloromethane		<0.0500	0.250								
Bromodichloromethane		<0.0500	0.250								
Bromoform		<0.0500	0.250								
Bromomethane		<0.0500	0.250								
Carbon disulfide		<0.250	0.750								
Carbon tetrachloride		<0.0500	0.250								
Chlorobenzene		<0.0500	0.250								
Chloroethane		<0.0500	0.250								
Chloroform		<0.0500	0.250								
Chloromethane		<0.0500	0.250								
cis-1,2-Dichloroethene		<0.0500	0.250								
cis-1,3-Dichloropropene		<0.0500	0.250								
Dibromochloromethane		<0.0500	0.250								
Dibromomethane		<0.0500	0.250								
Dichlorodifluoromethane		<0.0500	0.250								
Ethylbenzene		<0.0500	0.250								
Hexachlorobutadiene		<0.0500	0.250								
Iodomethane		<0.0500	0.250								

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 44 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190514A

Sample ID	MB-90899 MEOH	Batch ID:	90899	TestNo:	SW8260C	Units:	mg/Kg				
SampType:	MBLK	Run ID:	GCMS2_190514A	Analysis Date: 5/14/2019 5:05:00 PM		Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene		<0.0500	0.250								
m,p-Xylene		<0.0500	0.250								
Methyl tert-butyl ether		<0.0500	0.250								
Methylene chloride		<0.250	0.250								
Naphthalene		<0.250	0.750								
n-Butylbenzene		<0.0500	0.250								
n-Propylbenzene		<0.0500	0.250								
o-Xylene		<0.0500	0.250								
p-Isopropyltoluene		<0.0500	0.250								
sec-Butylbenzene		<0.0500	0.250								
Styrene		<0.0500	0.250								
tert-Butylbenzene		<0.0500	0.250								
Tetrachloroethene		<0.0500	0.250								
Toluene		<0.0500	0.250								
trans-1,2-Dichloroethene		<0.0500	0.250								
trans-1,3-Dichloropropene		<0.0500	0.250								
Trichloroethene		<0.0500	0.250								
Trichlorofluoromethane		<0.250	0.750								
Vinyl chloride		<0.0500	0.250								
Surr: 1,2-Dichloroethane-d4		2390		2500		95.7	52	149			
Surr: 4-Bromofluorobenzene		2450		2500		98.1	84	118			
Surr: Dibromofluoromethane		2480		2500		99.4	65	135			
Surr: Toluene-d8		2170		2500		86.7	84	116			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 45 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190515A

The QC data in batch 90928 applies to the following samples: 1905098-01A, 1905098-02A, 1905098-03A, 1905098-04A, 1905098-05A, 1905098-06A, 1905098-07A

Sample ID	LCS-90928	Batch ID:	90928	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	LCS	Run ID:	GCMS7_190515A	Analysis Date: 5/15/2019 2:48:00 PM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.0271	0.00100	0.02320	0	117	68	130			
1,2-Dichloroethane		0.0252	0.00100	0.02320	0	108	69	132			
1,4-Dichlorobenzene		0.0224	0.00100	0.02320	0	96.3	74	123			
2-Butanone		0.0935	0.0150	0.1160	0	80.6	49	136			
Benzene		0.0241	0.00100	0.02320	0	104	81	122			
Carbon tetrachloride		0.0261	0.00100	0.02320	0	112	66	138			
Chlorobenzene		0.0225	0.00100	0.02320	0	97.2	81	122			
Chloroform		0.0255	0.0300	0.02320	0	110	69	128			
Tetrachloroethene		0.0231	0.00100	0.02320	0	99.5	66	128			
Trichloroethene		0.0257	0.00100	0.02320	0	111	70	127			
Vinyl chloride		0.0240	0.00100	0.02320	0	103	50	134			
Surr: 1,2-Dichloroethane-d4		0.199		0.2000		99.5	72	119			
Surr: 4-Bromofluorobenzene		0.181		0.2000		90.5	76	119			
Surr: Dibromofluoromethane		0.204		0.2000		102	85	115			
Surr: Toluene-d8		0.187		0.2000		93.3	81	120			

Sample ID	MB-90928	Batch ID:	90928	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS7_190515A	Analysis Date: 5/15/2019 3:36:00 PM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		<0.000300	0.00100								
1,2-Dichloroethane		<0.000300	0.00100								
1,4-Dichlorobenzene		<0.000300	0.00100								
2-Butanone		<0.00500	0.0150								
Benzene		<0.000300	0.00100								
Carbon tetrachloride		<0.000300	0.00100								
Chlorobenzene		<0.000300	0.00100								
Chloroform		<0.0250	0.0300								
Tetrachloroethene		<0.000300	0.00100								
Trichloroethene		<0.000300	0.00100								
Vinyl chloride		<0.000300	0.00100								
Surr: 1,2-Dichloroethane-d4		0.208		0.2000		104	72	119			
Surr: 4-Bromofluorobenzene		0.195		0.2000		97.3	76	119			
Surr: Dibromofluoromethane		0.205		0.2000		102	85	115			
Surr: Toluene-d8		0.195		0.2000		97.4	81	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 46 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190515A

Sample ID	MB-90882 TCLP	Batch ID:	90928	TestNo:	SW1311/8260C	Units:	mg/L				
SampType:	MBLK	Run ID:	GCMS7_190515A	Analysis Date: 5/15/2019 4:00:00 PM		Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		<0.00300	0.0100								
1,2-Dichloroethane		<0.00300	0.0100								
1,4-Dichlorobenzene		<0.00300	0.0100								
2-Butanone		<0.0500	0.150								
Benzene		<0.00300	0.0100								
Carbon tetrachloride		<0.00300	0.0100								
Chlorobenzene		<0.00300	0.0100								
Chloroform		<0.250	0.300								
Tetrachloroethene		<0.00300	0.0100								
Trichloroethene		<0.00300	0.0100								
Vinyl chloride		<0.00300	0.0100								
Surr: 1,2-Dichloroethane-d4		2.09		2.000		105	72	119			
Surr: 4-Bromofluorobenzene		1.96		2.000		97.9	76	119			
Surr: Dibromofluoromethane		2.08		2.000		104	85	115			
Surr: Toluene-d8		1.96		2.000		97.9	81	120			

Sample ID	1905098-01AMS	Batch ID:	90928	TestNo:	SW1311/8260C	Units:	mg/L				
SampType:	MS	Run ID:	GCMS7_190515A	Analysis Date: 5/15/2019 7:13:00 PM		Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.244	0.0100	0.2320	0	105	68	130			
1,2-Dichloroethane		0.235	0.0100	0.2320	0	101	69	132			
1,4-Dichlorobenzene		0.207	0.0100	0.2320	0	89.1	74	123			
2-Butanone		0.838	0.150	1.160	0	72.3	49	136			
Benzene		0.228	0.0100	0.2320	0	98.4	81	122			
Carbon tetrachloride		0.241	0.0100	0.2320	0	104	66	138			
Chlorobenzene		0.210	0.0100	0.2320	0	90.6	81	122			
Chloroform		0.281	0.300	0.2320	0	121	69	128			
Tetrachloroethene		0.212	0.0100	0.2320	0	91.5	66	128			
Trichloroethene		0.237	0.0100	0.2320	0	102	70	127			
Vinyl chloride		0.220	0.0100	0.2320	0	94.6	50	134			
Surr: 1,2-Dichloroethane-d4		2.02		2.000		101	72	119			
Surr: 4-Bromofluorobenzene		1.85		2.000		92.3	76	119			
Surr: Dibromofluoromethane		2.04		2.000		102	85	115			
Surr: Toluene-d8		1.84		2.000		92.0	81	120			

Sample ID	1905098-01AMSD	Batch ID:	90928	TestNo:	SW1311/8260C	Units:	mg/L				
SampType:	MSD	Run ID:	GCMS7_190515A	Analysis Date: 5/15/2019 7:37:00 PM		Prep Date:	5/15/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.260	0.0100	0.2320	0	112	68	130	6.46	20	

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor							
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit							Page 47 of 61
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits							
	RL	Reporting Limit	S	Spike Recovery outside control limits							
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified							

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190515A

Sample ID	1905098-01AMSD	Batch ID:	90928	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MSD	Run ID:	GCMS7_190515A	Analysis Date: 5/15/2019 7:37:00 PM			Prep Date:	5/15/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichloroethane		0.250	0.0100	0.2320	0	108	69	132	6.18	20	
1,4-Dichlorobenzene		0.221	0.0100	0.2320	0	95.4	74	123	6.82	20	
2-Butanone		0.912	0.150	1.160	0	78.6	49	136	8.40	20	
Benzene		0.239	0.0100	0.2320	0	103	81	122	4.70	20	
Carbon tetrachloride		0.251	0.0100	0.2320	0	108	66	138	4.35	20	
Chlorobenzene		0.224	0.0100	0.2320	0	96.4	81	122	6.23	20	
Chloroform		0.297	0.300	0.2320	0	128	69	128	5.65	20	
Tetrachloroethene		0.222	0.0100	0.2320	0	95.9	66	128	4.69	20	
Trichloroethene		0.248	0.0100	0.2320	0	107	70	127	4.50	20	
Vinyl chloride		0.242	0.0100	0.2320	0	104	50	134	9.83	20	
Surr: 1,2-Dichloroethane-d4		1.97		2.000		98.3	72	119	0	0	
Surr: 4-Bromofluorobenzene		1.85		2.000		92.4	76	119	0	0	
Surr: Dibromofluoromethane		2.02		2.000		101	85	115	0	0	
Surr: Toluene-d8		1.83		2.000		91.5	81	120	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 48 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190516B

The QC data in batch 90951 applies to the following samples: 1905098-08A, 1905098-09A, 1905098-11A, 1905098-12A, 1905098-13A, 1905098-14A, 1905098-17A

Sample ID	LCS-90951	Batch ID:	90951	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	LCS	Run ID:	GCMS7_190516B	Analysis Date: 5/16/2019 11:43:00 AM			Prep Date:	5/16/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.0266	0.00100	0.02320	0	115	68	130			
1,2-Dichloroethane		0.0257	0.00100	0.02320	0	111	69	132			
1,4-Dichlorobenzene		0.0226	0.00100	0.02320	0	97.3	74	123			
2-Butanone		0.103	0.0150	0.1160	0	88.7	49	136			
Benzene		0.0245	0.00100	0.02320	0	106	81	122			
Carbon tetrachloride		0.0261	0.00100	0.02320	0	112	66	138			
Chlorobenzene		0.0226	0.00100	0.02320	0	97.5	81	122			
Chloroform		0.0255	0.0300	0.02320	0	110	69	128			
Tetrachloroethene		0.0230	0.00100	0.02320	0	99.2	66	128			
Trichloroethene		0.0259	0.00100	0.02320	0	112	70	127			
Vinyl chloride		0.0247	0.00100	0.02320	0	106	50	134			
Surr: 1,2-Dichloroethane-d4		0.204		0.2000		102	72	119			
Surr: 4-Bromofluorobenzene		0.194		0.2000		96.8	76	119			
Surr: Dibromofluoromethane		0.201		0.2000		101	85	115			
Surr: Toluene-d8		0.187		0.2000		93.6	81	120			

Sample ID	MB-90951	Batch ID:	90951	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS7_190516B	Analysis Date: 5/16/2019 1:19:00 PM			Prep Date:	5/16/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		<0.000300	0.00100								
1,2-Dichloroethane		<0.000300	0.00100								
1,4-Dichlorobenzene		<0.000300	0.00100								
2-Butanone		<0.00500	0.0150								
Benzene		<0.000300	0.00100								
Carbon tetrachloride		<0.000300	0.00100								
Chlorobenzene		<0.000300	0.00100								
Chloroform		<0.0250	0.0300								
Tetrachloroethene		<0.000300	0.00100								
Trichloroethene		<0.000300	0.00100								
Vinyl chloride		<0.000300	0.00100								
Surr: 1,2-Dichloroethane-d4		0.209		0.2000		105	72	119			
Surr: 4-Bromofluorobenzene		0.199		0.2000		99.6	76	119			
Surr: Dibromofluoromethane		0.200		0.2000		100	85	115			
Surr: Toluene-d8		0.198		0.2000		98.9	81	120			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 49 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190516B

Sample ID	MB-90925 TCLP	Batch ID:	90951	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MBLK	Run ID:	GCMS7_190516B	Analysis Date: 5/16/2019 3:22:00 PM			Prep Date:	5/16/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		<0.00300	0.0100								
1,2-Dichloroethane		<0.00300	0.0100								
1,4-Dichlorobenzene		<0.00300	0.0100								
2-Butanone		<0.0500	0.150								
Benzene		<0.00300	0.0100								
Carbon tetrachloride		<0.00300	0.0100								
Chlorobenzene		<0.00300	0.0100								
Chloroform		<0.250	0.300								
Tetrachloroethene		<0.00300	0.0100								
Trichloroethene		<0.00300	0.0100								
Vinyl chloride		<0.00300	0.0100								
Surr: 1,2-Dichloroethane-d4		2.12		2.000		106	72	119			
Surr: 4-Bromofluorobenzene		1.93		2.000		96.3	76	119			
Surr: Dibromofluoromethane		2.01		2.000		101	85	115			
Surr: Toluene-d8		1.98		2.000		99.0	81	120			

Sample ID	1905098-08AMS	Batch ID:	90951	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MS	Run ID:	GCMS7_190516B	Analysis Date: 5/16/2019 6:59:00 PM			Prep Date:	5/16/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.266	0.0100	0.2320	0	115	68	130			
1,2-Dichloroethane		0.267	0.0100	0.2320	0	115	69	132			
1,4-Dichlorobenzene		0.219	0.0100	0.2320	0	94.6	74	123			
2-Butanone		1.05	0.150	1.160	0	90.3	49	136			
Benzene		0.246	0.0100	0.2320	0	106	81	122			
Carbon tetrachloride		0.260	0.0100	0.2320	0	112	66	138			
Chlorobenzene		0.225	0.0100	0.2320	0	97.0	81	122			
Chloroform		0.382	0.300	0.2320	0	164	69	128			S
Tetrachloroethene		0.221	0.0100	0.2320	0	95.2	66	128			
Trichloroethene		0.247	0.0100	0.2320	0	106	70	127			
Vinyl chloride		0.250	0.0100	0.2320	0	108	50	134			
Surr: 1,2-Dichloroethane-d4		2.10		2.000		105	72	119			
Surr: 4-Bromofluorobenzene		1.91		2.000		95.3	76	119			
Surr: Dibromofluoromethane		2.03		2.000		101	85	115			
Surr: Toluene-d8		1.85		2.000		92.5	81	120			

Sample ID	1905098-08AMSD	Batch ID:	90951	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MSD	Run ID:	GCMS7_190516B	Analysis Date: 5/16/2019 7:23:00 PM			Prep Date:	5/16/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene		0.273	0.0100	0.2320	0	118	68	130	2.56	20	

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor							
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit							Page 50 of 61
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits							
	RL	Reporting Limit	S	Spike Recovery outside control limits							
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified							

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_190516B

Sample ID	1905098-08AMSD	Batch ID:	90951	TestNo:	SW1311/8260C		Units:	mg/L			
SampType:	MSD	Run ID:	GCMS7_190516B	Analysis Date:	5/16/2019 7:23:00 PM		Prep Date:	5/16/2019			
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichloroethane		0.268	0.0100	0.2320	0	116	69	132	0.448	20	
1,4-Dichlorobenzene		0.226	0.0100	0.2320	0	97.4	74	123	2.96	20	
2-Butanone		1.03	0.150	1.160	0	88.6	49	136	1.96	20	
Benzene		0.250	0.0100	0.2320	0	108	81	122	1.77	20	
Carbon tetrachloride		0.265	0.0100	0.2320	0	114	66	138	1.67	20	
Chlorobenzene		0.229	0.0100	0.2320	0	98.7	81	122	1.72	20	
Chloroform		0.344	0.300	0.2320	0	148	69	128	10.4	20	S
Tetrachloroethene		0.229	0.0100	0.2320	0	98.7	66	128	3.60	20	
Trichloroethene		0.251	0.0100	0.2320	0	108	70	127	1.53	20	
Vinyl chloride		0.260	0.0100	0.2320	0	112	50	134	4.12	20	
Surr: 1,2-Dichloroethane-d4		2.07		2.000		103	72	119	0	0	
Surr: 4-Bromofluorobenzene		1.89		2.000		94.3	76	119	0	0	
Surr: Dibromofluoromethane		2.02		2.000		101	85	115	0	0	
Surr: Toluene-d8		1.86		2.000		93.1	81	120	0	0	

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 51 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: IGN_190514A

The QC data in batch 90891 applies to the following samples: 1905098-01C, 1905098-02C, 1905098-03C, 1905098-04C

Sample ID	LCS-90891	Batch ID:	90891	TestNo:	SW1010	Units:	°C				
SampType:	LCS	Run ID:	IGN_190514A	Analysis Date:	5/14/2019 10:45:00 AM	Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ignitability		48.1	0	46.60	0	103	95	105			
Sample ID	MB-90891	Batch ID:	90891	TestNo:	SW1010	Units:	°C				
SampType:	MBLK	Run ID:	IGN_190514A	Analysis Date:	5/14/2019 10:45:00 AM	Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ignitability		>100	0								

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 52 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: IGN_190516A

The QC data in batch 90933 applies to the following samples: 1905098-05C, 1905098-06C, 1905098-07C, 1905098-08C, 1905098-09C, 1905098-11C

Sample ID	LCS-90933	Batch ID:	90933	TestNo:	SW1010	Units:	°C				
SampType:	LCS	Run ID:	IGN_190516A	Analysis Date:	5/16/2019 10:00:00 AM	Prep Date:	5/16/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ignitability		48.4	0	46.60	0	104	95	105			
Sample ID	MB-90933	Batch ID:	90933	TestNo:	SW1010	Units:	°C				
SampType:	MLBK	Run ID:	IGN_190516A	Analysis Date:	5/16/2019 10:00:00 AM	Prep Date:	5/16/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ignitability		>100	0								

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 53 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: IGN_190517A

The QC data in batch 90971 applies to the following samples: 1905098-12C, 1905098-13C, 1905098-14C, 1905098-17C

Sample ID	LCS-90971	Batch ID:	90971	TestNo:	SW1010	Units:	°C				
SampType:	LCS	Run ID:	IGN_190517A	Analysis Date:	5/17/2019 12:15:00 PM	Prep Date:	5/17/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ignitability		48.8	0	46.75	0	104	95	105			
Sample ID	MB-90971	Batch ID:	90971	TestNo:	SW1010	Units:	°C				
SampType:	MLBK	Run ID:	IGN_190517A	Analysis Date:	5/17/2019 12:15:00 PM	Prep Date:	5/17/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ignitability		>100	0								

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 54 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: PH2_190509A

The QC data in batch 90821 applies to the following samples: 1905098-01C, 1905098-02C, 1905098-03C, 1905098-04C, 1905098-05C, 1905098-06C, 1905098-07C, 1905098-08C, 1905098-09C, 1905098-11C, 1905098-12C, 1905098-13C, 1905098-14C, 1905098-17C

Sample ID	1905081-04A-DUP	Batch ID:	90821	TestNo:	SW9045D	Units:	pH Units@21.4°C				
SampType:	DUP	Run ID:	PH2_190509A	Analysis Date:	5/9/2019 1:30:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
pH		6.77	0	0	6.780				0.148		5
Sample ID	1905098-06C-DUP	Batch ID:	90821	TestNo:	SW9045D	Units:	pH Units@22.1°C				
SampType:	DUP	Run ID:	PH2_190509A	Analysis Date:	5/9/2019 1:30:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
pH		7.38	0	0	7.430				0.675		5

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 55 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_190509A

The QC data in batch 90835 applies to the following samples: 1905098-01C, 1905098-02C, 1905098-03C, 1905098-04C, 1905098-05C, 1905098-06C, 1905098-07C, 1905098-08C, 1905098-09C, 1905098-10D

Sample ID	1905098-03C-DUP	Batch ID:	90835	TestNo:	D2216	Units:	WT%				
SampType:	DUP	Run ID:	PMOIST_190509A	Analysis Date:	5/10/2019 8:32:00 AM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture		24.3	0	0	26.14		7.12	30			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 56 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_190514A

The QC data in batch 90902 applies to the following samples: 1905098-11C, 1905098-12C, 1905098-13C, 1905098-14C

Sample ID	1905156-09C-DUP	Batch ID:	90902	TestNo:	D2216	Units:	WT%				
SampType:	DUP	Run ID:	PMOIST_190514A	Analysis Date:	5/15/2019 8:33:00 AM	Prep Date:	5/14/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture		24.4	0	0	23.44		3.91	30			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 57 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_190516A

The QC data in batch 90954 applies to the following samples: 1905098-17C

Sample ID	1905176-01C-DUP	Batch ID:	90954	TestNo:	D2216	Units:	WT%				
SampType:	DUP	Run ID:	PMOIST_190516A	Analysis Date:	5/17/2019 8:34:00 AM	Prep Date:	5/16/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture		3.90	0	0	3.514		10.4	30			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 58 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_190517A

The QC data in batch 90979 applies to the following samples: 1905098-15D, 1905098-16D

Sample ID	1905098-16D-DUP	Batch ID:	90979	TestNo:	D2216	Units:	WT%				
SampType:	DUP	Run ID:	PMOIST_190517A	Analysis Date:	5/20/2019 8:32:00 AM	Prep Date:	5/17/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture		25.7	0	0	25.92		0.750	30			

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 59 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: UV/VIS_2_190509A

The QC data in batch 90813 applies to the following samples: 1905098-01C, 1905098-02C, 1905098-03C, 1905098-04C, 1905098-05C, 1905098-06C, 1905098-07C, 1905098-08C, 1905098-09C, 1905098-11C, 1905098-12C, 1905098-13C, 1905098-14C, 1905098-17C

Sample ID	MB-90813	Batch ID:	90813	TestNo:	Sw846 Ch7.3	Units:	mg/Kg				
SampType:	MBLK	Run ID:	UV/VIS_2_190509A	Analysis Date:	5/9/2019 5:12:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Reactive Cyanide		<0.0500	0.100								N
Sample ID	LCS-90813	Batch ID:	90813	TestNo:	Sw846 Ch7.3	Units:	mg/Kg				
SampType:	LCS	Run ID:	UV/VIS_2_190509A	Analysis Date:	5/9/2019 5:13:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Reactive Cyanide		1.25	0.100	40.00	0	3.13	1	10			N

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 60 of 61

CLIENT: Terracon
Work Order: 1905098
Project: Boundary Ventures

ANALYTICAL QC SUMMARY REPORT

RunID: WC_190509B

The QC data in batch 90813 applies to the following samples: 1905098-01C, 1905098-02C, 1905098-03C, 1905098-04C, 1905098-05C, 1905098-06C, 1905098-07C, 1905098-08C, 1905098-09C, 1905098-11C, 1905098-12C, 1905098-13C, 1905098-14C, 1905098-17C

Sample ID	MB-90813	Batch ID:	90813	TestNo:	Sw846 Ch7.3	Units:	mg/Kg				
SampType:	MBLK	Run ID:	WC_190509B	Analysis Date:	5/9/2019 3:35:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Reactive Sulfide		<20.0	20.0								N
Sample ID	LCS-90813	Batch ID:	90813	TestNo:	Sw846 Ch7.3	Units:	mg/Kg				
SampType:	LCS	Run ID:	WC_190509B	Analysis Date:	5/9/2019 3:40:00 PM	Prep Date:	5/9/2019				
Analyte		Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Reactive Sulfide		160	20.0	262.0	0	61.1	25	90			N

Qualifiers: B Analyte detected in the associated Method Blank
J Analyte detected between MDL and RL
ND Not Detected at the Method Detection Limit
RL Reporting Limit
J Analyte detected between SDL and RL

DF Dilution Factor
MDL Method Detection Limit
R RPD outside accepted control limits
S Spike Recovery outside control limits
N Parameter not NELAP certified

Page 61 of 61

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 919-4141

Report#/Lab ID#: 592365 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-1
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:35

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/09/19 20:25	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,

Quality Manager

Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified.
 N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592365 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-1

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 919-4141

Report#/Lab ID#: 592366 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-2
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 13:00

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	8.81	mg/Kg	0.5	<0.5	05/09/19 20:29	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,

Quality Manager

Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592366 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-2

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



Report#/Lab ID#: 592367 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-3
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:45

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	1.28	mg/Kg	0.5	<0.5	05/09/19 20:33	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,



Quality Manager



Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified.
 N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592367 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-3

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 919-4141

Report#/Lab ID#: 592368 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-4
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:08

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/09/19 19:59	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,



Quality Manager



Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592368 Matrix: soil

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-4

Attn: John DuPont

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 919-4141

Report#/Lab ID#: 592369 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-5
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:20

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/09/19 20:04	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,

Melanie S. Folien

Quality Manager

Kassandra C. G.

Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592369 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-5

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



Report#/Lab ID#: 592370 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-6
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:21

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/09/19 20:08	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,



Quality Manager



Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592370 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-6

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



Report#/Lab ID#: 592371 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-7
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 11:00

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/09/19 20:12	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,



Quality Manager



Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592371 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-7

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



Report#/Lab ID#: 592372 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-8
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 11:10

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/09/19 20:16	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,



Quality Manager



Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified.
 N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592372 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-8

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 919-4141

Report#/Lab ID#: 592373 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-9
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 11:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/09/19 20:21	9023M	S1,M,N,	35.4	22.8	92.8	83.3

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,

Quality Manager

Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified.
 N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592373 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-9

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	S2	Spike (MS,MSD) recovery issue. MS & MSD recovery outside acceptance range. LCS recovery OK. Probable matrix interference.
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 919-4141

Report#/Lab ID#: 592374 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-11
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 11:20

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/10/19 11:56	9023M	N,	8.4	56.5	107.9	85.7

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,

Melanie S. Folien

Quality Manager

Kassandra C. Acosta

Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592374 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-11

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



Report#/Lab ID#: 592375 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-12
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:24

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/10/19 13:13	9023M	N,	8.4	56.5	107.9	85.7

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,

Quality Manager

Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592375 **Matrix:** soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-12

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



Report#/Lab ID#: 592376 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-13
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:50

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	2.73	mg/Kg	0.5	<0.5	05/10/19 13:25	9023M	N,	8.4	56.5	107.9	85.7

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,



Quality Manager



Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified.
 N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592376 **Matrix:** soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-13

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



Report#/Lab ID#: 592377 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-14
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 11:44

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/10/19 13:17	9023M	N,	8.4	56.5	107.9	85.7

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,

Quality Manager

Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592377 Matrix: soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-14

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

Client: DHL Analytical
Attn: John DuPont
Address: 2300 Double Creek Dr
 Round Rock TX 78664
Phone: 512-388-8222 **FAX:** 512-388-8229



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 919-4141

Report#/Lab ID#: 592378 **Report Date:** 05/10/19
Project ID: #1905098
Sample Name: WC-18
Sample Matrix: soil
Date Received: 05/09/2019 **Time:** 12:30
Date Sampled: 05/08/2019 **Time:** 12:11

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date/Time Analyzed	Method ⁶	Data Qual. ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
T.O.X.	<0.5	mg/Kg	0.5	<0.5	05/10/19 13:21	9023M	N,	8.4	56.5	107.9	85.7

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results reflect only the sample identified above. The results have been carefully reviewed and to the best of my knowledge, unless otherwise indicated, meet NELAP requirements as described by AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2003, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted, Respectfully Submitted,



Quality Manager



Assistant Quality Manager

Numbers in RED are above our MDLs and may or may not indicate a permit exceedance.
 1. Quality assurance data for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results. 3. Recovery (Recov.) is the percent of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte detected between the RQL and the MDL. B =Analyte detected in associated method blank(s). C=poor CCV recovery. L=poor LCS recovery. S & S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference. N=not NELAP certified. N1=subcontract result enquire concerning NELAP certification. Solid sample results for all metals, except Mercury, reported on a dry weight basis (DWB). All other results for solid samples reported on an as received basis unless specifically identified as DWB.

Exceptions Report (FINAL SECTION / END-OF-REPORT):

Report #/Lab ID#: 592378 **Matrix:** soil

Attn: John DuPont

Client: DHL Analytical

Project ID: #1905098

Sample Name: WC-18

Unless otherwise identified by data qualifier "N" or by an exception report, all reported results represent parameters and tests for which AnalySys maintains NELAP certification; or results provided by a subcontractor with NELAP certification for the test



T104704268-19-17

Sample Temperature/Condition: $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Standard sample acceptability conditions met? : YES

Sample received in appropriate container(s), at appropriate temperature and pH.

J flag Discussion:

A J-flag data qualifier indicates that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data (where applicable):

Parameter	Qualif.	Comments
T.O.X.	N	NELAP accreditation for this analyte or this test method (and/or in the indicated matrix) for this analyte not available from TCEQ. 30 TAC§25.6(4) may apply.
T.O.X.	N	

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664

TEL: (512) 388-8222 FAX: (512) 388-8229
Work Order: 1905098

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Subcontractor:

Analysys Laboratory
3512 Montopolis
Austin, TX 78744

TEL: (512) 385-5886
FAX:
Acct #:

09-May-19

Sample Id	Matrix	DHL#	Date Collected	Bottle Type	TOX Requested Tests						
					SW9023M						
WC-1	592365	Soil	-01D	05/08/19 12:35 PM	4-OZGJAR	1					
WC-2	592366	Soil	-02D	05/08/19 01:00 PM	4-OZGJAR	1					
WC-3	592367	Soil	-03D	05/08/19 12:45 PM	4-OZGJAR	1					
WC-4	592368	Soil	-04D	05/08/19 12:08 PM	4-OZGJAR	1					
WC-5	592369	Soil	-05D	05/08/19 12:20 PM	4-OZGJAR	1					
WC-6	592370	Soil	-06D	05/08/19 12:21 PM	4-OZGJAR	1					
WC-7	592371	Soil	-07D	05/08/19 11:00 AM	4-OZGJAR	1					
WC-8	592372	Soil	-08D	05/08/19 11:10 AM	4-OZGJAR	1					
WC-9	592373	Soil	-09D	05/08/19 11:30 AM	4-OZGJAR	1					
WC-11	592374	Soil	-11D	05/08/19 11:20 AM	4-OZGJAR	1					
WC-12	592375	Soil	-12D	05/08/19 12:24 PM	4-OZGJAR	1					
WC-13	592376	Soil	-13D	05/08/19 12:50 PM	4-OZGJAR	1					
WC-14	592377	Soil	-14D	05/08/19 11:44 AM	4-OZGJAR	1					
WC-18	592378	Soil	-17D	05/08/19 12:11 PM	4-OZGJAR	1					

General Comments:

Please analyze these samples with a Standard Turnaround Time.
Call John DuPont if you have questions.
Quality Control Package Needed: Standard / _____
EMAIL report to both cac@dhlanalytical.com & dupont@dhlanalytical.com

Relinquished by:	Date/Time	Date/Time
	5/9/19 10:30	Received by: S. Ortega 5/9/19 @ 12:30
Relinquished by:		4345 TFLUT TB/CJS.

1

SAMPLE CHECK-IN

Date: 5/9/19

Sample IDs: 592365-378

Samples Checked by: S.O

COC Entry Line	1	2	3	4	5	6	7	8	9	10
a 4 oz soil jar	((((((((()
b 8 oz soil jar										
c 16 oz soil jar										
d 32 oz soil jar										
e Soil VOA vials w/Stir Bar										
f Soil VOA vials (unpres)										
VOA Vials	if Headspace Present (+#s)									
g 40 mL VOA vials (unpres)										
h 40 mL VOA vials (HCl)										
Unpreserved Bottles										
i 500 mL amber (unpres)										
j 950 mL amber (unpres)										
k 8 oz HDPE (unpres)										
l 16 oz HDPE (unpres)										
m 32 oz HDPE (unpres)										
Preserved Bottles										
Acid pH paper CL#	pH									
n 120 mL amber (H ₂ SO ₄)										
o 250 mL amber (H ₂ SO ₄)										
p 500 mL amber (H ₂ SO ₄)										
q 8 oz Nalgene (HNO ₃)										
r 16 oz Nalgene (HNO ₃)										
s 32 oz Nalgene (HNO ₃)										
Base pH paper CL#	pH									
t 8 oz HDPE (NaOH)										
u 8 oz HDPE (ZnAc/NaOH)										
v 16 oz HDPE (Ascorbic acid)										
Air										
w Tedlar bag										
x SUMA canister										
Miscellaneous										
y Sterile Bottle										
z Other										
Bottles in Austin	a	a	a	a	a	a	a	a	a	a
Bottles in Corpus Christi										
Bottles to Subcontract Lab(s)										

4090

SIR SPEEDY PRINTING - AUSTIN, TEXAS

LIVELY DELIVERY SERVICE

2200 GRAND AVENUE PKWY. STE # 103 • AUSTIN, TEXAS 78728
 PHONE (512) 491-8116 • FAX (512) 339-0794

Order ID# 16865
 Date 5/9/16

Type of Service:	<input type="checkbox"/> All Day	<input checked="" type="checkbox"/> 4 Hour	<input type="checkbox"/> 2 Hour	<input type="checkbox"/> ASAP	Time: _____
FROM	Name <u>DHL Analytical</u>		Name <u>Analytical</u>		
	Address <u>2300 Double Creek Dr.</u>		Address <u>3512 Montopolis</u>		
City	<u>Round Rock, TX, 78664</u>		<u>Austin, TX 78744</u>		
Phone #	<u>(512) 368-8222</u>		<u>(512) 385-5886</u>		
No. Pieces	Description <u>Cooler</u>			Weight	
3rd Party Billing		Wait Time			
Driver		Time		Charges	
Received by: <u>Kristine Slavek</u>		PRINT NAME: <u>Kristine Slavek</u>			

ASI Sample Evaluation

F-0029 V8-100418
Effective Date: 10/04/18
1 of 1

Date: 5/9/19Sample IDs: 592365-378 # of C-O-Cs: 1Samples Delivery by: Client Bus LSO UPS Fed-Ex ASI/PU Courier Carrier Bill # _____

Sample Receiving			
Item	Cooler	Y	N
1	Cooler temperature appropriate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Samples on ice/from fridge	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Custody Seal Present (if shipped)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3a	custody seal was intact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3b	custody seal was signed/dated	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item	COC	Y	N	COC Comment
4	COC received	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	COC Complete	<input type="checkbox"/>	<input type="checkbox"/>	
5a	Sample identification	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5b	Date Collected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5c	Time Collected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5d	Number of containers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5e	Preservation type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5f	Matrix	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5g	Parameters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5h	Relinquished by Client	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6	COC info match sample labels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
7	Assist with completion of COC	<input type="checkbox"/>	<input type="checkbox"/>	
8	Additional information supplied by client	<input type="checkbox"/>	<input type="checkbox"/>	

Item	Sample Containers	Y	N	Sample Container Comments If no for item 9-10 comment req.
9	Bottles Intact/Integrity OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
10	Samples properly labelled/identifiable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
11	VOA vials headspace OK (if required)	<input type="checkbox"/>	<input type="checkbox"/>	
12	Samples Properly pH Preserved (if required)	<input type="checkbox"/>	<input type="checkbox"/>	
12a	Dissolved Metals field filtered and preserved	<input type="checkbox"/>	<input type="checkbox"/>	
12b	Acid Preserved (pH OK)	<input type="checkbox"/>	<input type="checkbox"/>	
12c	Base Preserved (pH OK)	<input type="checkbox"/>	<input type="checkbox"/>	

Project Management			
Item	Hold Time	Y	N
13	Samples received within hold-time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Samples received with time to complete analysis within hold-time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
List of affected parameters:			

Item	Water VOC-VOAs	Y	N
15	Special compounds required	<input type="checkbox"/>	<input type="checkbox"/>
If required indicate if received in proper container			
15a	Acrolein (unpreserved-3d from time of sampling)*adjust rush time	<input type="checkbox"/>	<input type="checkbox"/>
15b	Acrolein/Acrylonitrile (pH 4-5)	<input type="checkbox"/>	<input type="checkbox"/>
15c	Vinyl chloride/Styrene/2-chloroethyl vinyl ether (unpreserved)	<input type="checkbox"/>	<input type="checkbox"/>

Item	Bulk Soil Sampling (TPH/VOC/BTEX)	Y	N
16	Bulk soil samples received	<input type="checkbox"/>	<input type="checkbox"/>
16a	Petroleum Storage Tank Rule	<input type="checkbox"/>	<input type="checkbox"/>
16b	Client indicated no hydrocarbons in C6-C12 for TPH or high level VOC	<input type="checkbox"/>	<input type="checkbox"/>
16c	Client indicated VOA not used due to sampling difficulty	<input type="checkbox"/>	<input type="checkbox"/>
16d	ASI assessed VOA not used due to sample physical characteristics	<input type="checkbox"/>	<input type="checkbox"/>

Item	Sample Containers	Y	N
17	Samples in proper containers excluding items 15 and 16	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Item	COC	
7	Assist with completion of COC	<input type="checkbox"/>
8	Additional information supplied by client	<input type="checkbox"/>
18	Hold requested	<input type="checkbox"/>
19	Sub-contract analysis required	<input type="checkbox"/>

Client notification required due to sample integrity issue identified on the COC or ASI Sample Evaluation Form (F-0029) Method of notification to client: Phone E-Mail Client response: Proceed with analysis Resample and re-submit

Request			
Special report formats			
TRRP <input type="checkbox"/>	Landfill <input type="checkbox"/>	NPDES (2) <input type="checkbox"/>	SW-846 (3) <input type="checkbox"/>
Dry-Weight(9) <input type="checkbox"/>	TRRP (no QC) <input type="checkbox"/>	Unit Conversion <input type="checkbox"/>	Other <input checked="" type="checkbox"/>
QC Pages <input type="checkbox"/>			
EDD Required			
General <input type="checkbox"/>	TRRP <input type="checkbox"/>	Client Specific <input type="checkbox"/>	
TAT Request			
5-day <input type="checkbox"/>	Standard <input checked="" type="checkbox"/>	Rush <input type="checkbox"/>	
Requested Due Date _____			

Client Requested Changes			
TAT Change Request to			
Standard <input type="checkbox"/>	Rush <input type="checkbox"/>	Requested Due Date _____	
Date of change		Initials	
Method of notification: phone <input type="checkbox"/> email <input type="checkbox"/>			
Parameter Change Request			
Add	<hr/>		
Remove	<hr/>		
Date of change		Initials	
Method of notification: phone <input type="checkbox"/> email <input type="checkbox"/>			

COC Correction Notes			
<hr/>			
<hr/>			
Date of change			
Initials			
Method of notification: phone <input type="checkbox"/> email <input type="checkbox"/>			