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Record of Work Completed – Drilling Assessment

COGCC Location Name (ID)	PRF-63N97W 21NESE (315979)
Operator Location Name	Pinyon Ridge Federal C-1W
Remediation Project #	23348
Legal Description	NESE Sec. 21 T3N-R97W
Coordinates (Lat/Long)	40.212478 / -108.276409
County	Rio Blanco County, Colorado

Ms. Organ,

Confluence Compliance Companies, LLC (Confluence) prepared Report of Work Completed (ROWC) for Anschutz Exploration Corporation (Anschutz) to document the findings of a drilling assessment conducted to delineate the vertical and horizontal extents of soil impacts associated with a release of produced water at the Pinyon Ridge Federal C-1W well pad (Location). The Location is 22.7 miles northwest of Meeker, Colorado in Rio Blanco County as illustrated in the attached Topographic Location Map. Additional information on the Location and associated remediation project is provided in the title block above and in the attached topographic location map and site diagram. The ROWC provides a brief background on the incident and remediation project, methods used to complete the drilling assessment, results of the assessment, and recommendations for how to proceed with this information.

Background

On March 27, 2022, an unknown volume of produced water overflowed from a tank and was spilled inside secondary containment. Standing fluids were observed both inside and outside of secondary containment. Fluids were recovered via vacuum truck resulting in the recovery of approximately 19 barrels of produced water. Initial Form 19 Document 403000387 was submitted to document the reportable release and to open Spill/Release Point ID 481972. Initial Form 27 Document 403056825 was submitted to open Remediation Project Number 23348 associated with Spill/Release Point ID 481972.

Initial site investigation efforts including soil and water sampling in accordance with Colorado Oil and Gas Conservation Commission (COGCC) 900 Series Rules were completed on May 10, 2022. Eight soil samples were collected at the Location from the point of release (POR) and from visibly saturated areas of the pad surface. Analytical results of soil samples indicated exceedances of COGCC Table 915-1 Residential Screening Levels for total petroleum hydrocarbons (TPH), pH, sodium adsorption ratio (SAR), and arsenic. Three water samples were also collected from the location. 220510-PREFCIW-WW was collected from equipment on site as a potential waste characterization sample. 220510-PREFCIW-OFLOW POND was collected from the overflow pond on location, and 220510-PREFCIW-STOCK was collected from the surface water downgradient of the location. The waste characterization sample demonstrated levels of benzene, chloride, and

sulfate above COGCC Table 915-1 allowable limits. Analytical results of both surface water samples were within COGCC Table 915-1 allowable limits for all constituents of concern.

The results of initial site investigation were reported to the COGCC via Form 27 Document 403068552. The COGCC approved Document 403068552 with conditions of approval requiring that impacts be delineated within the tank battery secondary containment structure and that a waste characterization sample of the produced water be collected.

Methodology

On July 25, 2022, Confluence coordinated and oversaw remedial investigation activities associated with the historical produced water release at the Location. A total of 10 soil borings were advanced using a direct push drill rig. With the exception of SB04, two soil samples were collected from each soil boring: one from the most impacted interval as determined by field observations and one from the terminus of the borehole. No sample was collected from SB04 due to encountering refusal at 4 feet below ground surface (bgs). Field screening was completed using visual and olfactory observations.

Subsurface conditions were logged and collected samples were packed on ice and delivered to a laboratory for analysis of the approved reduced suite of TPH, pH, SAR, and arsenic.

Results

These results summarize findings from the site investigation. For organizational and presentation purposes the results summary is divided between general observations of lithology and hydrogeology for the entire Location and site investigation activities.

Collected spatial data are depicted in the attached Site Diagram. Laboratory analytical reports are attached and summarized in the Laboratory Results Summary Table.

Lithology and Hydrogeology

Lithology at the Location is characterized by clay loam with interbedded mudstone lenses between 4 feet bgs to 22.5 feet bgs. Groundwater is expected to flow northeast towards Open Gulch and into the White River, located 4.7 miles south of the Location.

Site Investigation

Laboratory results of the borehole samples collected on July 25, 2022, indicate compliance with COGCC Table 915-1 Residential Soil Screening Levels except for SAR, pH, and arsenic. SAR exceedances range from 6.44 to 34.7. Exceedances of pH range between 4.81 to 5.55. Arsenic exceedances range between 4.65 milligrams per kilogram (mg/kg) to 49.7 mg/kg.

Samples were field screened with visual and olfactory observations. Hydrocarbon staining and a degraded hydrocarbon odor were noted in SB02, SB03, SB05, and SB10. A thin black layer of silty soil was noted in SB01, SB06, SB07, and SB08. The soil had no hydrocarbon odor and is believed to be naturally occurring organic material, and not associated with the hydrocarbon impacts noted in other sample locations.



Analysis and Recommendations

Based on a review of laboratory results and spatial data, Soil Suitability for Reclamation (SSR) constituents and arsenic exceeding COGCC Table 915-1 Residential Soil Screening Levels remain at the Location. Confluence recommends the collection of background samples to establish native SAR, pH, and arsenic levels.

Horizontal and vertical delineation of hydrocarbon impacts, specifically TPH, appears to have been achieved; however, due to safety concerns, borings could not be advanced directly next to active equipment. Borings were also not advanced within the secondary containment as they would compromise the integrity of the containment and pose a safety concern.

Confluence further recommends the impacted soil identified by the May 2022 investigation be removed and properly disposed of, or a plan be prepared to remediate the soil impacts in-situ.

Finally, it is recommended that Anschutz request to use the 220510-PREFCIW-WW sample collected during the May 2022 investigation from the disposal well pump for the purpose of characterizing the spill commodity source as the requested produced water characterization sample.

Confluence is grateful for the opportunity to support you with this project. If you have any questions about the methods, results, or recommendations presented here, please do not hesitate to contact me.

Regards,



Sage Maher
Project Manager
(404) 641-8912

Attachments

- Topographic Location Diagram
- Site Diagram – Site Investigation
- Analytical Results Summary Table
- Laboratory Reports
- Soil Boring Logs



Topographic Location Map

Anschutz Exploration Corp

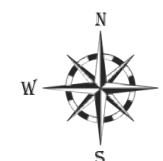
Pinyon Ridge Federal C-1W

(PRF-63N97W /21NESE)

COGCC Location ID: 315979

Rio Blanco County

NESE Sec. 21 T3N-R75W



Topographic map sourced from 2020 Earth Point
using data provided by United States Geological
Survey

Created by: Chris McKisson on 05/23/2022.

Pinyon Ridge Federal C-1W



Site Diagram Site Characterization

Anschutz Exploration Corp

PRF-63N97W /21NESE

(Pinyon Ridge Federal C-1W)




COGCC Location ID: 315979

Rio Blanco County

NESE Sec. 21 T3N-R97W



Legend

-  Soil Sample – 05/10/2022
-  Soil Sample – 07/25/2022
-  Water Sample – 05/10/2022

Spatial data was collected using a handheld GPS unit with submeter accuracy. Illustration discrepancies may be present in this diagram due to the inherent limitations of data accuracy for both project data and the underlying aerial imagery. The position of illustrated data may have been manually adjusted to align with the aerial imagery in a manner more representative of field conditions for presentation purposes only.

Map created by: Andrew Smith on 07/28/2022.

100 ft

Soil Screening and Remediation Limits				Organic Compounds (mg/kg [ppm])																										
COGCC Table 915-1 Residential -->				NA	500	NA	NA	NA	1.2	490	5.8	58	30	27	360	1800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	18	24	2	180	
Sample Date	Commodity Spilled (grade, container, production fluids)	Solid/Soil Source (Equipment) (Well/Sump, Separator, Tank Battery, Dump Line, Pit, Cuttings, Background, etc.)	Sample ID	PID (ppm)	TPH (total volatile and extractable petroleum hydrocarbons) (GRO+DRO+ORO)	TPH-GRO (G&C10) Low Fraction	TPH-DRO (C10-C28) High Fraction	TPH-ORO (C28-C36) High Fraction	Benzene	Toluene	Ethylbenzene	Xylenes - total (sum of o-, m-, p-isomers)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Acenaphthene	Anthracene	Benzo(A)anthracene	Benzo(A)pyrene	Benzo(B)fluoranthene	Benzo(K)fluoranthene	Chrysene	Dibenzo(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-C,D)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Naphthalene	Pyrene	
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-PUMPSW6	40	69.3	0.791	41.6	26.9	<0.00100	<0.00500	<0.00250	0.00178	<0.00500	0.0079	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.00262	<0.00600	<0.0200	<0.0200	<0.0200	<0.00600	
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-PUMPSW12	0.8	20.2	0.12	6.34	13.7	<0.00100	<0.00500	<0.00250	0.00124	<0.00500	0.00752	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.0200	<0.0200	<0.0200	<0.00600	
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-PORE12	28.7	60.2	1.8	31.9	26.5	<0.00100	<0.00500	<0.00250	0.0143	0.00528	0.0234	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.0200	<0.0200	<0.0200	<0.00600	
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-PORE36	1470	1743	1400	282	61.2	0.0123	0.0705	1.23	21.3	6.02	5.85	0.00424	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.00897	<0.00600	0.0719	0.205	0.105	<0.00600
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-GENE18	397.6	4414	495	3900	18.6	0.0054	0.0194	1.45	5.03	11.3	2.6	0.24	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.383	<0.00600	2.8	3.19	1.74	0.116
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-GENE36	438.9	2855	485	2370	<40.0	0.00455	0.0123	1.82	5.2	12.4	2.88	0.266	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.403	<0.00600	2.34	2.76	1.54	0.142
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-NSTAIN12	138.7	339	5.68	227	106	<0.00100	<0.00100	0.00085	0.00376	0.00478	0.114	0.0128	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	0.003	<0.00600	0.00282	0.0505	<0.00600	0.178	0.00555	0.00902	0.00317	
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-NESTAIN12	88.8	3392	1.51	2340	1050	0.00065	0.00455	0.00657	0.216	0.295	0.153	0.0748	<0.00600	<0.00600	<0.00600	0.00459	0.00408	0.0185	<0.00600	0.0204	0.401	<0.00600	1.35	1.72	0.277	0.0154	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S801@17.5'-20'	NA	2.03	<0.100	<4.00	2.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S801@20'-22.5'	NA	0.481	<0.100	<4.00	0.481	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S802@10'-15'	NA	49.2	49.2	<4.00	<4.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S802@15'-17.5'	NA	2.13	0.0277	<4.00	2.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S803@16'-19'	NA	155	142	6.44	6.42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S803@20'-22.5'	NA	83.6	44.2	34.8	4.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S805@17.5'-20'	NA	0.0374	0.0374	<4.00	<4.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S805@22'-25'	NA	2.54	0.0411	<4.00	2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S806@12.5'-15'	NA	26.5	<0.100	2.39	24.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S806@17.5'-20'	NA	ND	<0.100	<4.00	<4.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S807@12.5'-15'	NA	2.93	<0.100	<4.00	2.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S807@15'-17.5'	NA	ND	<0.100	<4.00	<4.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S808@8'-10'	NA	3.51	<0.100	<4.00	3.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S808@12'-14.5'	NA	ND	<0.100	<4.00	<4.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S809@12.5'-15'	NA	1.15	0.0765	<4.00	1.07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S809@17'-19.5'	NA	0.444	0.0938	<4.00	0.350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S810@12.5'-15'	NA	336	332	2.17	1.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
7/25/2022	Produced Water	Tank Battery	220725-C1W-S810@17.5'-19.5'	NA	0.836	0.0384	<4.00	0.798	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Soil Screening and Remediation Limits				Soil Suitability for Reclamation				Metals (mg/kg [ppm])												
COGCC Table 915-1 Residential ->				4	6	6-8.3	2	0.68	NA	15000	71	NA	0.3	3100	400	NA	1500	390	390	23000
Sample Date	Commodity Spilled (crude, condensate, produced water, production fluids)	Solid/Soil Source (Equipment) (Vault/Sump, Separator, Tank, Battery, Dump Line, Pit, Cullings, Background, etc.)	Sample ID	EC (Specific Conductance) (milliSiemens/centimeter) (by saturated paste method)	SAR (Sodium Adsorption Ratio) (calculation) (by saturated paste method)	pH (pH Units) (by saturated paste method)	Boron - Hot Water Soluble (mg/L)	Arsenic	Barium (LDNR True Total Barium)	Barium	Cadmium (mg/kg)	Chromium (III)	Chromium (VI)	Copper	Lead	Mercury (Total Mercury by EPA 1471)	Nickel	Selenium	Silver	Zinc
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-PUMPSW6	1.300	2.02	8.84	0.138	5.45	NA	105	0.281	NA	0.261	14.6	8.62	NA	12.9	<2.00	<1.00	43.9
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-PUMPSW12	1.560	12.4	8.85	0.812	5.92	NA	132	0.289	NA	<0.255	15.3	8.65	NA	15.5	<2.00	<1.00	44.4
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-PORE12	1.060	4.63	8.45	0.903	4.46	NA	95.8	0.261	NA	0.3	17.5	6.94	NA	22.5	<2.00	<1.00	40.2
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-PORE36	2.810	17.6	7.77	1.040	5.15	NA	95.3	0.285	NA	<1.00	14.3	8.26	NA	12.2	<2.00	<1.00	44.7
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-GENE18	0.955	1.14	7.38	0.573	4.52	NA	80.6	0.289	NA	<1.00	15	10.7	NA	11.6	<2.00	<1.00	44.3
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-GENE36	0.443	3.46	7.67	0.647	7.12	NA	114	0.388	NA	<1.00	21.2	10.7	NA	16.2	<2.00	<1.00	57.8
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-NSTAIN12	1.390	0.871	7.69	0.423	7.85	NA	114	0.308	NA	<1.00	18.3	11	NA	18.8	0.838	<1.00	53.1
5/10/2022	Produced Water	Tank Battery	220510-PRFCIW-NESTAIN12	0.729	8.25	8.38	0.696	6.44	NA	193	0.323	NA	<1.00	15.3	10.2	NA	18	<2.00	<1.00	46.1
7/25/2022	Produced Water	Tank Battery	220725-C1W-S801@17.5'-20'	NA	17.5	5.45	NA	30.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S801@20'-22.5'	NA	14.2	6.54	NA	6.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S802@10'-15'	NA	8.11	8.12	NA	6.43	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S802@15'-17.5'	NA	5.90	7.52	NA	26.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S803@16'-19'	NA	8.23	8.08	NA	19.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S803@20'-22.5'	NA	7.02	6.66	NA	38.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S805@17.5'-20'	NA	4.60	7.82	NA	6.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S805@22'-25'	NA	10.6	7.94	NA	8.70	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S806@12.5'-15'	NA	14.3	4.81	NA	49.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S806@17.5'-20'	NA	23.5	7.19	NA	6.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S807@12.5'-15'	NA	26.8	5.03	NA	12.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S807@15'-17.5'	NA	34.7	5.55	NA	4.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S808@8'-10'	NA	15.3	7.14	NA	21.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S808@12'-14.5'	NA	19.6	6.73	NA	11.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S809@12.5'-15'	NA	9.55	8.05	NA	6.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S809@17'-19.5'	NA	6.44	7.98	NA	7.09	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S810@12.5'-15'	NA	21.2	7.94	NA	8.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2022	Produced Water	Tank Battery	220725-C1W-S810@17.5'-19.5'	NA	5.78	7.51	NA	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Confluence Compliance Companies - CO

Sample Delivery Group: L1519613
Samples Received: 07/28/2022
Project Number:
Description: Pinyon Ridge C1W
Site: PINYON RIDGE
Report To: Chris McKisson
403 ½ Rockwood Lane
Grand Junction, CO 81507

Entire Report Reviewed By:



Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1
Tc: Table of Contents	2
Ss: Sample Summary	3
Cn: Case Narrative	7
Sr: Sample Results	8
220725-C1W-SB01@17.5'-20' L1519613-01	8
220725-C1W-SB01@20'-22.5' L1519613-02	9
220725-C1W-SB02@10'-15' L1519613-03	10
220725-C1W-SB02@15'-17.5' L1519613-04	11
220725-C1W-SB03@16'-19' L1519613-05	12
220725-C1W-SB03@20'-22.5' L1519613-06	13
220725-C1W-SB05@17.5'-20' L1519613-07	14
220725-C1W-SB05@22'-25' L1519613-08	15
220725-C1W-SB06@12.5'-15' L1519613-09	16
220725-C1W-SB06@17.5'-20' L1519613-10	17
220725-C1W-SB07@12.5'-15' L1519613-11	18
220725-C1W-SB07@15'-17.5' L1519613-12	19
220725-C1W-SB08@8'-10' L1519613-13	20
220725-C1W-SB08@12'-14.5' L1519613-14	21
220725-C1W-SB09@12.5'-15' L1519613-15	22
220725-C1W-SB09@17'-19.5' L1519613-16	23
220725-C1W-SB10@12.5'-15' L1519613-17	24
220725-C1W-SB10@17.5'-19.5' L1519613-18	25
Qc: Quality Control Summary	26
Wet Chemistry by Method 9045D	26
Metals (ICPMS) by Method 6020	32
Volatile Organic Compounds (GC) by Method 8015D/GRO	35
Semi-Volatile Organic Compounds (GC) by Method 8015M	40
Gl: Glossary of Terms	42
Al: Accreditations & Locations	43
Sc: Sample Chain of Custody	44

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

SAMPLE SUMMARY

220725-C1W-SB01@17.5'-20' L1519613-01 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 09:10

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:12	08/10/22 19:12	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903736	1	08/01/22 11:00	08/01/22 13:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	5	08/03/22 09:00	08/04/22 14:50	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 10:43	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 19:52	JAS	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

220725-C1W-SB01@20'-22.5' L1519613-02 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 09:15

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:15	08/10/22 19:15	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	10	08/03/22 09:00	08/04/22 15:03	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 11:04	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 17:27	JAS	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

220725-C1W-SB02@10'-15' L1519613-03 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 09:45

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:18	08/10/22 19:18	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903736	1	08/01/22 11:00	08/01/22 13:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	5	08/03/22 09:00	08/04/22 15:06	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1904264	25	07/28/22 19:17	08/02/22 22:57	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 17:40	JAS	Mt. Juliet, TN

⁹ Sc

220725-C1W-SB02@15'-17.5' L1519613-04 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 09:50

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:21	08/10/22 19:21	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903736	1	08/01/22 11:00	08/01/22 13:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	5	08/03/22 09:00	08/04/22 15:09	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1904270	1	07/28/22 19:17	08/03/22 09:13	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 19:13	JAS	Mt. Juliet, TN

220725-C1W-SB03@16'-19' L1519613-05 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 10:20

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:23	08/10/22 19:23	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903736	1	08/01/22 11:00	08/01/22 13:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1904634	5	08/03/22 09:00	08/04/22 15:12	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902696	100	07/28/22 19:17	07/29/22 10:54	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:59	JAS	Mt. Juliet, TN

SAMPLE SUMMARY

220725-C1W-SB03@20'-22.5' L1519613-06 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 10:25

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 19:26	08/10/22 19:26	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:24	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902696	200	07/28/22 19:17	07/29/22 11:17	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 20:05	JAS	Mt. Juliet, TN

220725-C1W-SB05@17.5'-20' L1519613-07 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 11:20

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904084	1	08/10/22 18:18	08/10/22 18:18	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:27	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1904270	1	07/28/22 19:17	08/03/22 09:33	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 17:53	JAS	Mt. Juliet, TN

220725-C1W-SB05@22'-25' L1519613-08 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 11:35

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 15:03	08/10/22 15:03	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:30	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1904270	1	07/28/22 19:17	08/03/22 09:54	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:07	JAS	Mt. Juliet, TN

220725-C1W-SB06@12.5'-15' L1519613-09 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 12:20

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 16:58	08/10/22 16:58	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904469	1	08/02/22 14:00	08/02/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:34	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 12:52	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 20:19	JAS	Mt. Juliet, TN

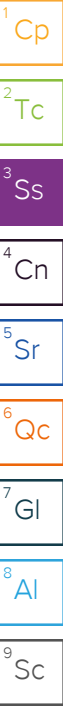
220725-C1W-SB06@17.5'-20' L1519613-10 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 12:25

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:01	08/10/22 17:01	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904588	1	08/02/22 16:34	08/03/22 13:00	SDE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:37	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 13:14	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:20	JAS	Mt. Juliet, TN



SAMPLE SUMMARY

220725-C1W-SB07@12.5'-15' L1519613-11 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 12:55

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:04	08/10/22 17:04	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904878	1	08/03/22 09:56	08/03/22 12:00	SDE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 10:42	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 13:35	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 19:26	JAS	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

220725-C1W-SB07@15'-17.5' L1519613-12 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 13:00

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:07	08/10/22 17:07	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904878	1	08/03/22 09:56	08/03/22 12:00	SDE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:40	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 13:57	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:46	JAS	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

220725-C1W-SB08@8'-10' L1519613-13 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 13:15

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:09	08/10/22 17:09	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904218	1	08/02/22 09:00	08/02/22 11:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903349	5	08/01/22 09:00	08/02/22 11:27	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 14:18	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 19:39	JAS	Mt. Juliet, TN

⁹ Sc

220725-C1W-SB08@12'-14.5' L1519613-14 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 13:20

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:12	08/10/22 17:12	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904469	1	08/02/22 14:00	08/02/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903349	5	08/01/22 09:00	08/02/22 11:30	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902694	1	07/28/22 19:17	07/29/22 14:40	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903900	1	08/02/22 11:29	08/02/22 18:33	JAS	Mt. Juliet, TN

220725-C1W-SB09@12.5'-15' L1519613-15 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 13:45

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:15	08/10/22 17:15	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1903946	1	08/01/22 14:00	08/01/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903349	5	08/01/22 09:00	08/02/22 11:34	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1903614	1	07/28/22 19:17	08/01/22 13:21	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903903	1	08/02/22 09:14	08/02/22 16:57	JAS	Mt. Juliet, TN

SAMPLE SUMMARY

220725-C1W-SB09@17'-19.5' L1519613-16 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 13:50

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:18	08/10/22 17:18	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904218	1	08/02/22 09:00	08/02/22 11:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1903349	5	08/01/22 09:00	08/02/22 11:37	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1903614	1	07/28/22 19:17	08/01/22 13:44	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903903	1	08/02/22 09:14	08/02/22 17:09	JAS	Mt. Juliet, TN

220725-C1W-SB10@12.5'-15' L1519613-17 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 14:10

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:26	08/10/22 17:26	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904469	1	08/02/22 14:00	08/02/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:44	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1902696	100	07/28/22 19:17	07/29/22 11:39	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903903	1	08/02/22 09:14	08/02/22 17:09	JAS	Mt. Juliet, TN

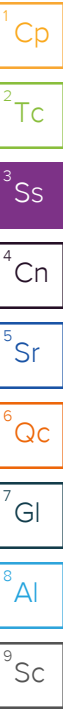
220725-C1W-SB10@17.5'-19.5' L1519613-18 Solid

Collected by
Andrew Smith

Collected date/time
07/25/22 14:15

Received date/time
07/28/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1904085	1	08/10/22 17:29	08/10/22 17:29	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1904469	1	08/02/22 14:00	08/02/22 16:00	NTG	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1902672	5	08/07/22 12:12	08/10/22 11:53	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1903614	1	07/28/22 19:17	08/01/22 14:07	MGF	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1903903	1	08/02/22 09:14	08/02/22 17:22	JAS	Mt. Juliet, TN



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chris Ward
Project Manager



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	17.5		1	08/10/2022 19:12	WG1904084

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	5.45	<u>T8</u>	1	08/01/2022 13:00	WG1903736

Sample Narrative:

L1519613-01 WG1903736: 5.45 at 23.2C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	30.9		0.100	1.00	5	08/04/2022 14:50	WG1904634

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 10:43	WG1902694
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	114			77.0-120		07/29/2022 10:43	WG1902694

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 19:52	WG1903900
C28-C36 Motor Oil Range	2.03	<u>J</u>	0.274	4.00	1	08/02/2022 19:52	WG1903900
(S) <i>o</i> -Terphenyl	55.2			18.0-148		08/02/2022 19:52	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	14.2		1	08/10/2022 19:15	WG1904084

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.54	T8	1	08/01/2022 16:00	WG1903946

Sample Narrative:

L1519613-02 WG1903946: 6.54 at 24.1C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.14		0.200	2.00	10	08/04/2022 15:03	WG1904634

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 11:04	WG1902694
(S) a,a,a-Trifluorotoluene(FID)	114			77.0-120		07/29/2022 11:04	WG1902694

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:27	WG1903900
C28-C36 Motor Oil Range	0.481	J	0.274	4.00	1	08/02/2022 17:27	WG1903900
(S) o-Terphenyl	62.8			18.0-148		08/02/2022 17:27	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	8.11		1	08/10/2022 19:18	WG1904084

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.12	T8	1	08/01/2022 13:00	WG1903736

Sample Narrative:

L1519613-03 WG1903736: 8.12 at 23.4C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.43		0.100	1.00	5	08/04/2022 15:06	WG1904634

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	49.2		0.543	2.50	25	08/02/2022 22:57	WG1904264
(S) a,a,a-Trifluorotoluene(FID)	93.3			77.0-120		08/02/2022 22:57	WG1904264

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:40	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 17:40	WG1903900
(S) o-Terphenyl	39.3			18.0-148		08/02/2022 17:40	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.90		1	08/10/2022 19:21	WG1904084

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.52	<u>T8</u>	1	08/01/2022 13:00	WG1903736

Sample Narrative:

L1519613-04 WG1903736: 7.52 at 23.1C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	26.0		0.100	1.00	5	08/04/2022 15:09	WG1904634

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0277	<u>J</u>	0.0217	0.100	1	08/03/2022 09:13	WG1904270
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	94.5			77.0-120		08/03/2022 09:13	WG1904270

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 19:13	WG1903900
C28-C36 Motor Oil Range	2.10	<u>J</u>	0.274	4.00	1	08/02/2022 19:13	WG1903900
(S) <i>o</i> -Terphenyl	50.5			18.0-148		08/02/2022 19:13	WG1903900

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	8.23		1	08/10/2022 19:23	WG1904084

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.08	T8	1	08/01/2022 13:00	WG1903736

Sample Narrative:

L1519613-05 WG1903736: 8.08 at 23.3C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	19.1		0.100	1.00	5	08/04/2022 15:12	WG1904634

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	142		2.17	10.0	100	07/29/2022 10:54	WG1902696
(S)							
a,a,a-Trifluorotoluene(FID)	92.5			77.0-120		07/29/2022 10:54	WG1902696

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	6.44		1.61	4.00	1	08/02/2022 18:59	WG1903900
C28-C36 Motor Oil Range	6.42		0.274	4.00	1	08/02/2022 18:59	WG1903900
(S) o-Terphenyl	43.1			18.0-148		08/02/2022 18:59	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	7.02		1	08/10/2022 19:26	WG1904084

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.66	<u>T8</u>	1	08/01/2022 16:00	WG1903946

Sample Narrative:

L1519613-06 WG1903946: 6.66 at 23.2C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	38.2		0.100	1.00	5	08/10/2022 11:24	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	44.2	<u>B</u>	4.34	20.0	200	07/29/2022 11:17	WG1902696
(S)							
<i>a,a,a</i> -Trifluorotoluene(FID)	95.9			77.0-120		07/29/2022 11:17	WG1902696

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	34.8		1.61	4.00	1	08/02/2022 20:05	WG1903900
C28-C36 Motor Oil Range	4.58		0.274	4.00	1	08/02/2022 20:05	WG1903900
(S) <i>o</i> -Terphenyl	51.9			18.0-148		08/02/2022 20:05	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	4.60		1	08/10/2022 18:18	WG1904084

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.82	<u>T8</u>	1	08/01/2022 16:00	WG1903946

Sample Narrative:

L1519613-07 WG1903946: 7.82 at 23.7C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.30		0.100	1.00	5	08/10/2022 11:27	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0374	<u>J</u>	0.0217	0.100	1	08/03/2022 09:33	WG1904270
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	93.3			77.0-120		08/03/2022 09:33	WG1904270

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:53	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 17:53	WG1903900
(S) <i>o</i> -Terphenyl	58.0			18.0-148		08/02/2022 17:53	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	10.6		1	08/10/2022 15:03	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.94	T8	1	08/01/2022 16:00	WG1903946

Sample Narrative:

L1519613-08 WG1903946: 7.94 at 23.2C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	8.70		0.100	1.00	5	08/10/2022 11:30	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0411	J	0.0217	0.100	1	08/03/2022 09:54	WG1904270
(S)							
a,a,a-Trifluorotoluene(FID)	93.4			77.0-120		08/03/2022 09:54	WG1904270

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 18:07	WG1903900
C28-C36 Motor Oil Range	2.50	J	0.274	4.00	1	08/02/2022 18:07	WG1903900
(S) o-Terphenyl	55.3			18.0-148		08/02/2022 18:07	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	14.3		1	08/10/2022 16:58	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	4.81	<u>T8</u>	1	08/02/2022 16:00	WG1904469

Sample Narrative:

L1519613-09 WG1904469: 4.81 at 23.8C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	49.7		0.100	1.00	5	08/10/2022 11:34	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 12:52	WG1902694
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	113			77.0-120		07/29/2022 12:52	WG1902694

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	2.39	<u>J</u>	1.61	4.00	1	08/02/2022 20:19	WG1903900
C28-C36 Motor Oil Range	24.1		0.274	4.00	1	08/02/2022 20:19	WG1903900
(S) <i>o</i> -Terphenyl	50.9			18.0-148		08/02/2022 20:19	WG1903900

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	23.5		1	08/10/2022 17:01	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.19	T8	1	08/03/2022 13:00	WG1904588

Sample Narrative:

L1519613-10 WG1904588: 7.19 at 24.2C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.59		0.100	1.00	5	08/10/2022 11:37	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 13:14	WG1902694
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120		07/29/2022 13:14	WG1902694

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 18:20	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 18:20	WG1903900
(S) o-Terphenyl	56.0			18.0-148		08/02/2022 18:20	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	26.8		1	08/10/2022 17:04	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	5.03	<u>T8</u>	1	08/03/2022 12:00	WG1904878

Sample Narrative:

L1519613-11 WG1904878: 5.03 at 24.3C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	12.0		0.100	1.00	5	08/10/2022 10:42	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 13:35	WG1902694
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	114			77.0-120		07/29/2022 13:35	WG1902694

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 19:26	WG1903900
C28-C36 Motor Oil Range	2.93	<u>J</u>	0.274	4.00	1	08/02/2022 19:26	WG1903900
(S) <i>o</i> -Terphenyl	55.3			18.0-148		08/02/2022 19:26	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	34.7		1	08/10/2022 17:07	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	5.55	T8	1	08/03/2022 12:00	WG1904878

Sample Narrative:

L1519613-12 WG1904878: 5.55 at 24.2C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	4.65		0.100	1.00	5	08/10/2022 11:40	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 13:57	WG1902694
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120		07/29/2022 13:57	WG1902694

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 18:46	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 18:46	WG1903900
(S) o-Terphenyl	50.5			18.0-148		08/02/2022 18:46	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	15.3		1	08/10/2022 17:09	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.14	<u>T8</u>	1	08/02/2022 11:00	WG1904218

Sample Narrative:

L1519613-13 WG1904218: 7.14 at 23.3C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	21.3		0.100	1.00	5	08/02/2022 11:27	WG1903349

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 14:18	WG1902694
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	111			77.0-120		07/29/2022 14:18	WG1902694

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 19:39	WG1903900
C28-C36 Motor Oil Range	3.51	<u>J</u>	0.274	4.00	1	08/02/2022 19:39	WG1903900
(S) <i>o</i> -Terphenyl	55.3			18.0-148		08/02/2022 19:39	WG1903900

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	19.6		1	08/10/2022 17:12	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	6.73	T8	1	08/02/2022 16:00	WG1904469

Sample Narrative:

L1519613-14 WG1904469: 6.73 at 23.9C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	11.1		0.100	1.00	5	08/02/2022 11:30	WG1903349

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	07/29/2022 14:40	WG1902694
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120		07/29/2022 14:40	WG1902694

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 18:33	WG1903900
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/02/2022 18:33	WG1903900
(S) o-Terphenyl	56.4			18.0-148		08/02/2022 18:33	WG1903900

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	9.55		1	08/10/2022 17:15	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.05	<u>T8</u>	1	08/01/2022 16:00	WG1903946

Sample Narrative:

L1519613-15 WG1903946: 8.05 at 23.1C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	6.50		0.100	1.00	5	08/02/2022 11:34	WG1903349

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0765	<u>J</u>	0.0217	0.100	1	08/01/2022 13:21	WG1903614
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	99.8			77.0-120		08/01/2022 13:21	WG1903614

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 16:57	WG1903903
C28-C36 Motor Oil Range	1.07	<u>J</u>	0.274	4.00	1	08/02/2022 16:57	WG1903903
(S) <i>o</i> -Terphenyl	52.8			18.0-148		08/02/2022 16:57	WG1903903

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

Calculated Results

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte					
Sodium Adsorption Ratio	6.44		1	08/10/2022 17:18	WG1904085

Wet Chemistry by Method 9045D

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	7.98	T8	1	08/02/2022 11:00	WG1904218

Sample Narrative:

L1519613-16 WG1904218: 7.98 at 22.7C

Metals (ICPMS) by Method 6020

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
Arsenic	7.09		0.100	1.00	5	08/02/2022 11:37	WG1903349

Volatile Organic Compounds (GC) by Method 8015D/GRO

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0938	J	0.0217	0.100	1	08/01/2022 13:44	WG1903614
(S)							
a,a,a-Trifluorotoluene(FID)	99.3			77.0-120		08/01/2022 13:44	WG1903614

Semi-Volatile Organic Compounds (GC) by Method 8015M

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:09	WG1903903
C28-C36 Motor Oil Range	0.350	J	0.274	4.00	1	08/02/2022 17:09	WG1903903
(S) o-Terphenyl	49.8			18.0-148		08/02/2022 17:09	WG1903903

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	21.2		1	08/10/2022 17:26	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.94	T8	1	08/02/2022 16:00	WG1904469

Sample Narrative:

L1519613-17 WG1904469: 7.94 at 24.2C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	8.86		0.100	1.00	5	08/10/2022 11:44	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	332		2.17	10.0	100	07/29/2022 11:39	WG1902696
(S)							
a,a,a-Trifluorotoluene(FID)	93.9			77.0-120		07/29/2022 11:39	WG1902696

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	2.17	J	1.61	4.00	1	08/02/2022 17:09	WG1903903
C28-C36 Motor Oil Range	1.81	J	0.274	4.00	1	08/02/2022 17:09	WG1903903
(S) o-Terphenyl	37.8			18.0-148		08/02/2022 17:09	WG1903903

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.78		1	08/10/2022 17:29	WG1904085

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.51	<u>T8</u>	1	08/02/2022 16:00	WG1904469

Sample Narrative:

L1519613-18 WG1904469: 7.51 at 23.9C

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
Arsenic	5.25		0.100	1.00	5	08/10/2022 11:53	WG1902672

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
TPH (GC/FID) Low Fraction	0.0384	<u>J</u>	0.0217	0.100	1	08/01/2022 14:07	WG1903614
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	101			77.0-120		08/01/2022 14:07	WG1903614

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg	mg/kg			
C10-C28 Diesel Range	U		1.61	4.00	1	08/02/2022 17:22	WG1903903
C28-C36 Motor Oil Range	0.798	<u>J</u>	0.274	4.00	1	08/02/2022 17:22	WG1903903
(S) <i>o</i> -Terphenyl	36.9			18.0-148		08/02/2022 17:22	WG1903903

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L1519613-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1519613-05 08/01/22 13:00 • (DUP) R3821296-2 08/01/22 13:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.08	8.04	1	0.496		1

Sample Narrative:

OS: 8.08 at 23.3C

DUP: 8.04 at 23.4C

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1519700-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1519700-01 08/01/22 13:00 • (DUP) R3821296-3 08/01/22 13:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.61	7.62	1	0.131		1

Sample Narrative:

OS: 7.61 at 23.4C

DUP: 7.62 at 23.5C

Laboratory Control Sample (LCS)

(LCS) R3821296-1 08/01/22 13:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.91	99.1	99.0-101	

Sample Narrative:

LCS: 9.91 at 23.9C

L1519603-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1519603-03 08/01/22 16:00 • (DUP) R3821459-2 08/01/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	pH	su		%		%
pH	8.18	8.19	1	0.122		1

Sample Narrative:

OS: 8.18 at 23.5C

DUP: 8.19 at 23.6C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1519861-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1519861-03 08/01/22 16:00 • (DUP) R3821459-3 08/01/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.95	7.96	1	0.126		1

Sample Narrative:

OS: 7.95 at 23.1C

DUP: 7.96 at 23.1C

Laboratory Control Sample (LCS)

(LCS) R3821459-1 08/01/22 16:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.90	99.0	99.0-101	

Sample Narrative:

LCS: 9.9 at 24.9C

L1519856-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1519856-02 08/02/22 11:00 • (DUP) R3821644-2 08/02/22 11:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.28	7.29	1	0.137		1

Sample Narrative:

OS: 7.28 at 22.6C

DUP: 7.29 at 22.7C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1520009-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1520009-01 08/02/22 11:00 • (DUP) R3821644-3 08/02/22 11:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.74	7.76	1	0.258		1

Sample Narrative:

OS: 7.74 at 22.9C

DUP: 7.76 at 23.2C

Laboratory Control Sample (LCS)

(LCS) R3821644-1 08/02/22 11:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	9.90	99.0	99.0-101	

Sample Narrative:

LCS: 9.9 at 22C

L1519987-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1519987-03 08/02/22 16:00 • (DUP) R3821843-2 08/02/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.64	7.65	1	0.131		1

Sample Narrative:

OS: 7.64 at 23.6C
DUP: 7.65 at 23.6C

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

L1520018-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1520018-02 08/02/22 16:00 • (DUP) R3821843-3 08/02/22 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.04	8.08	1	0.496		1

Sample Narrative:

OS: 8.04 at 23.2C
DUP: 8.08 at 23C

Laboratory Control Sample (LCS)

(LCS) R3821843-1 08/02/22 16:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.90	99.0	99.0-101	

Sample Narrative:

LCS: 9.9 at 23.9C

L1519613-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1519613-10 08/03/22 13:00 • (DUP) R3822121-2 08/03/22 13:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.19	7.17	1	0.279		1

Sample Narrative:

OS: 7.19 at 24.2C

DUP: 7.17 at 24.3C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1519620-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1519620-05 08/03/22 13:00 • (DUP) R3822121-3 08/03/22 13:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	pH	su		%		%
pH	9.24	9.24	1	0.000		1

Sample Narrative:

OS: 9.24 at 24C

DUP: 9.24 at 24.1C

Laboratory Control Sample (LCS)

(LCS) R3822121-1 08/03/22 13:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 23.8C

L1520009-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1520009-05 08/03/22 12:00 • (DUP) R3822204-2 08/03/22 12:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.77	7.74	1	0.387		1

Sample Narrative:

OS: 7.77 at 23.9C

DUP: 7.74 at 24C

L1520326-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1520326-05 08/03/22 12:00 • (DUP) R3822204-3 08/03/22 12:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	pH	su		%		%
pH	7.44	7.41	1	0.404		1

Sample Narrative:

OS: 7.44 at 23.9C

DUP: 7.41 at 24C

Laboratory Control Sample (LCS)

(LCS) R3822204-1 08/03/22 12:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 23.5C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3824592-1 08/10/22 10:36

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.100	1.00

Laboratory Control Sample (LCS)

(LCS) R3824592-3 08/10/22 10:39

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	85.6	85.6	80.0-120	

L1519613-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519613-11 08/10/22 10:42 • (MS) R3824592-6 08/10/22 10:52 • (MSD) R3824592-7 08/10/22 10:55

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	12.0	90.3	104	78.3	92.0	5	75.0-125			14.1	20

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3821674-1 08/02/22 10:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00

Laboratory Control Sample (LCS)

(LCS) R3821674-2 08/02/22 10:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	95.0	95.0	80.0-120	

L1519025-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519025-12 08/02/22 10:08 • (MS) R3821674-5 08/02/22 10:18 • (MSD) R3821674-6 08/02/22 10:21

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	0.913	90.2	94.1	89.3	93.2	5	75.0-125			4.19	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3822796-1 08/04/22 13:45

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Arsenic	U		0.100	1.00

Laboratory Control Sample (LCS)

(LCS) R3822796-2 08/04/22 13:48

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Arsenic	100	99.4	99.4	80.0-120	

L1518594-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1518594-07 08/04/22 13:51 • (MS) R3822796-5 08/04/22 14:01 • (MSD) R3822796-6 08/04/22 14:04

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Arsenic	100	6.40	103	108	96.5	101	5	75.0-125			4.53	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3821594-2 07/29/22 06:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	113			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3821594-1 07/29/22 05:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.76	105	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			104	77.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R3820917-3 07/29/22 06:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.987	⬇	0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	95.9			77.0-120

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

(LCS) R3820917-1 07/29/22 05:14 • (LCSD) R3820917-2 07/29/22 05:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.17	4.87	94.0	88.5	72.0-127			5.98	20
(S) a,a,a-Trifluorotoluene(FID)				99.0	99.3	77.0-120				

L1518914-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1518914-01 07/29/22 07:29 • (MS) R3820917-4 07/29/22 15:08 • (MSD) R3820917-5 07/29/22 15:30

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	142	1.86	112	137	77.6	95.2	25.8	10.0-151			20.1	28
(S) a,a,a-Trifluorotoluene(FID)					99.7	101		77.0-120				

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3822946-2 08/01/22 11:04

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3822946-1 08/01/22 09:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.33	115	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			109	77.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3823165-2 08/02/22 20:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.543	2.50
(S) a,a,a-Trifluorotoluene(FID)	99.3			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3823165-1 08/02/22 19:53

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.13	93.3	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			112	77.0-120	

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Method Blank (MB)

(MB) R3822313-2 08/03/22 08:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	96.3			77.0-120

Laboratory Control Sample (LCS)

(LCS) R3822313-1 08/03/22 07:42

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.90	89.1	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			104	77.0-120	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3821899-1 08/02/22 17:01

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	66.8			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3821899-2 08/02/22 17:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	37.3	74.6	50.0-150	
(S) o-Terphenyl			97.7	18.0-148	

L1519607-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519607-01 08/02/22 21:51 • (MS) R3821899-3 08/02/22 22:04 • (MSD) R3821899-4 08/02/22 22:17

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	49.4	U	U	U	0.000	0.000	50	50.0-150	J6	J6	0.000	20
(S) o-Terphenyl					0.000	0.000		18.0-148	J7	J7		

Sample Narrative:

OS: Cannot run at lower dilution due to viscosity of extract

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R3822003-1 08/02/22 16:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	73.0			18.0-148

Laboratory Control Sample (LCS)

(LCS) R3822003-2 08/02/22 16:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	38.9	77.8	50.0-150	
(S) o-Terphenyl			82.6	18.0-148	

L1519744-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1519744-03 08/02/22 18:12 • (MS) R3822003-3 08/02/22 18:24 • (MSD) R3822003-4 08/02/22 18:37

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	48.2	1440	1690	1280	519	0.000	25	50.0-150	V	J3 V	27.6	20
(S) o-Terphenyl					0.000	0.000		18.0-148	J7	J7		

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

ACCREDITATIONS & LOCATIONS

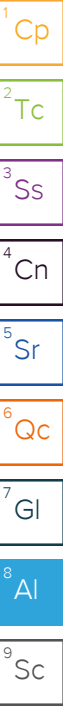
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

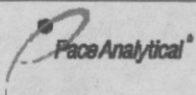
Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio--VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA -- ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA -- ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA--Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.





CHAIN-OF-CUSTODY Analytical Request Document

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>
Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: Confluence Compliance Companies, LLC.		Billing Information: Info on file	
Address: Info on file		Email To: info on file	
Report To: Chris McKisson		Site Collection Info/Address:	
Copy To: Chris McKisson, remediation@confluence-cc.com		State: County/City: Time Zone Collected: CO / Moffat []PT [X]MT []CT []ET	
Customer Project Name/Number: Voloshin Morton 1-8 Backgrounds		Compliance Monitoring? [] Yes [X] No	
Phone:	Site/Facility ID #: Voloshin Morton 1-8	DW PWS ID #:	
Email:	Purchase Order #:	DW Location Code:	
Collected By (print): Andrew Smith	Quote #:	Immediately Packed on Ice:	
Collected By (signature): <i>A. Donita</i>	Turnaround Date Required: Standard Turnaround	[X] Yes [] No	
Sample Disposal: [] Dispose as appropriate [] Return [] Archive: [] Hold:	Rush: (Expedite Charges Apply) [] Same Day [] Next Day [] 2 Day [] 3 Day [] 4 Day [] 5 Day	Field Filtered (if applicable): [] Yes [] No	
Analysis:			
* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)			

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)
			Date	Time	Date	Time			
220725-C1W-SB01@17.5'-20'	SL	G	7/25/2022	0910				2	G
220725-C1W-SB01@20'-22.5'	SL	G	7/25/2022	0915				2	G
220725-C1W-SB02@10'-15'	SL	G	7/25/2022	0945				2	G
220725-C1W-SB02@15'-17.5'	SL	G	7/25/2022	0950				2	G
220725-C1W-SB03@16'-19'	SL	G	7/25/2022	1020				2	G
220725-C1W-SB03@20'-22.5'	SL	G	7/25/2022	1025				2	G
220725-C1W-SB05@17.5'-20'	SL	G	7/25/2022	1120				2	G
220725-C1W-SB05@22'-25'	SL	G	7/25/2022	1135				2	G
220725-C1W-SB06@12.5'-15'	SL	G	7/25/2022	1220				2	G
220725-C1W-SB06@17.5'-20'	SL	G	7/25/2022	1225				2	G

Customer Remarks / Special Conditions / Possible Hazards:	Type of Ice Used: Wet Blue Dry None
	Packing Material Used:
	Radchem sample(s) screened (<500 cpm): Y N NA

Relinquished by/Company: (Signature) <i>A. Donita</i>	Date/Time: 7/27/22 1330	Received by/Company: (Signature) <i>[Signature]</i>	Date/Time:
Relinquished by/Company: (Signature) <i>[Signature]</i>	Date/Time: 7/27/22 1500	Received by/Company: (Signature) <i>[Signature]</i>	Date/Time:
Relinquished by/Company: (Signature) <i>[Signature]</i>	Date/Time:	Received by/Company: (Signature) <i>[Signature]</i>	Date/Time: 7/28/22 900

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Container Preservative Type **		Lab Project Manager:	
** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other			
Analyses		Lab Profile/Line:	
Table 915-1 VOCs TPH (ORO, GRO, DRO) Table 915-1 Metal's Table 915-1 PAHs pH, EC, SAR Boron (Hot Water Soluble Soil)	Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signature Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: Y N NA Sample pH Acceptable Y N NA pH Strips: Y N NA Sulfide Present Y N NA Lead Acetate Strips: Y N NA		
	LAB USE ONLY: Lab Sample # / Comments: U1515613		
	LAB Sample Temperature Info: Temp Blank Received: Y N NA Therm ID#: Cooler 1 Temp Upon Receipt: °C Cooler 1 Therm Corr. Factor: °C Cooler 1 Corrected Temp: °C Comments:		
	SHORT HOLDS PRESENT (<72 hours): Y N N/A		
	Lab Tracking #:		
	Samples received via: FEDEX UPS Client Courier Pace Courier		
	F105		
	Trip Blank Received: Y N NA HCL MeOH TSP Other		
	Non Conformance(s): Page: 1 YES / NO of: 2		

YES / NO of: 2

21519613

<u>Tracking Numbers</u>	<u>Temperature</u>
575580849576	Dea 7 0.3 to 0.3
9587	Dea 7 0.3 to 0.3



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Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: Confluence Compliance Companies, LLC.		Billing Information:	
Address: Info on file		Info on file	
Report To: Chris McKisson		Email To: info on file	
Copy To: Chris McKisson, remediation@confluence-cc.com		Site Collection Info/Address:	
Customer Project Name/Number: Pinyon Ridge C-1W		State: County/City: Time Zone Collected:	
		CO / Rio Blanco [] PT [X] MT [] CT [] ET	
Phone:	Site/Facility ID #: C-1W	Compliance Monitoring?	
Email:		[] Yes [X] No	
Collected By (print): Andrew Smith	Purchase Order #:	DW PWS ID #:	
	Quote #:	DW Location Code:	
Collected By (signature): <i>A. Sonita</i>	Turnaround Date Required: Standard	Immediately Packed on Ice:	
	Turnaround	[X] Yes [] No	
Sample Disposal:	Rush: (Expedite Charges Apply)	Field Filtered (if applicable):	
[] Dispose as appropriate	[] Same Day [] Next Day	[] Yes [] No	
[] Return	[] 2 Day [] 3 Day		
[] Archive:	[] 4 Day [] 5 Day	Analysis: _____	
[] Hold:			

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)
			Date	Time	Date	Time			
220725-C1W-SB01@17.5'-20'	SL	G	7/25/2022	0910				2	G
220725-C1W-SB01@20'-22.5'	SL	G	7/25/2022	0915				2	G
220725-C1W-SB02@10'-15'	SL	G	7/25/2022	0945				2	G
220725-C1W-SB02@15'-17.5'	SL	G	7/25/2022	0950				2	G
220725-C1W-SB03@16'-19'	SL	G	7/25/2022	1020				2	G
220725-C1W-SB03@20'-22.5'	SL	G	7/25/2022	1025				2	G
220725-C1W-SB05@17.5'-20'	SL	G	7/25/2022	1120				2	G
220725-C1W-SB05@22'-25'	SL	G	7/25/2022	1135				2	G
220725-C1W-SB06@12.5'-15'	SL	G	7/25/2022	1220				2	G
220725-C1W-SB06@17.5'-20'	SL	G	7/25/2022	1225				2	G

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

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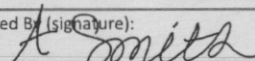
Container Preservative Type **										Lab Project Manager:																													
** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____																																							
Analyses										Lab Profile/Line:																													
<table><tr><td>Table 915-1 VOCs</td><td>TPH (ORO, GRO, DRO)</td><td>Table 915-1 Metal's</td><td>Table 915-1 PAHs</td><td>pH, SAR, Arsenic</td><td>Boron (Hot Water Soluble Soil)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>										Table 915-1 VOCs	TPH (ORO, GRO, DRO)	Table 915-1 Metal's	Table 915-1 PAHs	pH, SAR, Arsenic	Boron (Hot Water Soluble Soil)															Lab Sample Receipt Checklist:									
										Table 915-1 VOCs	TPH (ORO, GRO, DRO)	Table 915-1 Metal's	Table 915-1 PAHs	pH, SAR, Arsenic	Boron (Hot Water Soluble Soil)																								
Custody Seals Present/Intact Y N NA																																							
Custody Signatures Present Y N NA																																							
Collector Signature Present Y N NA																																							
Bottles Intact Y N NA																																							
Correct Bottles Y N NA																																							
Sufficient Volume Y N NA																																							
Samples Received on Ice Y N NA																																							
VOA - Headspace Acceptable Y N NA																																							
USDA Regulated Soils Y N NA																																							
Samples in Holding Time Y N NA																																							
Residual Chlorine Present Y N NA																																							
Cl Strips: _____																																							
Sample pH Acceptable Y N NA																																							
pH Strips: _____																																							
Sulfide Present Y N NA																																							
Lead Acetate Strips: _____																																							
LAB USE ONLY:																																							
Lab Sample # / Comments:																																							
L1519613																																							

Relinquished by/Company: <i>A. Sonita</i>	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY	
Table #:	
Acctnum:	
Template:	
Prelogin:	
PM:	
PB:	
Trip Blank Received: Y N NA	
HCL MeOH TSP Other	
Non Conformance(s):	Page: _____
YES / NO	of: _____

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Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: Confluence Compliance Companies, LLC.		Billing Information:	
Address: Info on file		Info on file	
Report To: Chris McKisson		Email To: info on file	
Copy To: Chris McKisson, remediation@confluence-cc.com		Site Collection Info/Address:	
Customer Project Name/Number: Pinyon Ridge C-1W		State: County/City: Time Zone Collected: CO / Rio Blanco [] PT [X] MT [] CT [] ET	
Phone:	Site/Facility ID #: Pinyon Ridge C-1W	Compliance Monitoring?	
Email:		[] Yes [X] No	
Collected By (print): Andrew Smith	Purchase Order # :	DW PWS ID #:	
	Quote #:	DW Location Code:	
Collected By (signature): 	Turnaround Date Required: Standard	Immediately Packed on Ice:	
	Turnaround	[X] Yes [] No	
Sample Disposal:	Rush: (Expedite Charges Apply)	Field Filtered (if applicable):	
[] Dispose as appropriate	[] Same Day [] Next Day	[] Yes [] No	
[] Return	[] 2 Day [] 3 Day		
[] Archive: _____	[] 4 Day [] 5 Day	Analysis: _____	
[] Hold:			

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

[illegible]

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or
MTJL Log-in Number Here

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Container Preservative Type **										Lab Project Manager:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses				Lab Profile/Line:
Table 915-1 VOCs				Lab Sample Receipt Checklist:
TPH (ORO, GRO, DRO)				Custody Seals Present/Intact Y N NA
Table 915-1 Metal's				Custody Signatures Present Y N NA
Table 915-1 PAHs				Collector Signature Present Y N NA
pH, SAR, Arsenic				Bottles Intact Y N NA
Boron (Hot Water Soluble Soil)				Correct Bottles Y N NA
				Sufficient Volume Y N NA
				Samples Received on Ice Y N NA
				VOA - Headspace Acceptable Y N NA
				USDA Regulated Soils Y N NA
				Samples in Holding Time Y N NA
				Residual Chlorine Present Y N NA
				Cl Strips: _____
				Sample pH Acceptable Y N NA
				pH Strips: _____
				Sulfide Present Y N NA
				Lead Acetate Strips: _____
				LAB USE ONLY:
				Lab Sample # / Comments:
				21519613

Customer Remarks / Special Conditions / Possible Hazards:	Type of Ice Used: Wet Blue Dry None				SHORT HOLDS PRESENT (<72 hours) : Y N N/A				LAB Sample Temperature Info:			
	Packing Material Used:				Lab Tracking #:				Temp Blank Received: Y N NA			
	Radchem sample(s) screened (<500 cpm): Y N NA				Samples received via:				Therm ID#: _____			
					FEDEX UPS Client Courier Pace Courier				Cooler 1 Temp Upon Receipt: ____oC Cooler 1 Therm Corr. Factor: ____oC Cooler 1 Corrected Temp: ____oC Comments:			
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)			Date/Time:	MTJL LAB USE ONLY			Trip Blank Received: Y N NA HCL MeOH TSP Other			
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)			Date/Time:	Acctnum:						
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)			Date/Time:	Template: Prelogin:						
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)			Date/Time:	PM: PB:			Non Conformance(s):		Page: _____ of: _____	



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Company: Confluence Compliance Companies, LLC.		Billing Information:	
Address: Info on file		Info on file	
Report To: Chris McKisson		Email To: info on file	
Copy To: Chris McKisson, remediation@confluence-cc.com		Site Collection Info/Address:	
Customer Project Name/Number: Pinyon Ridge C-1W		State: County/City: Time Zone Collected:	
		CO / Rio Blanco [] PT [X] MT [] CT [] ET	
Phone:	Site/Facility ID #: C-1W	Compliance Monitoring?	
Email:		[] Yes [X] No	
Collected By (print): Andrew Smith	Purchase Order #:	DW PWS ID #:	
	Quote #:	DW Location Code:	
Collected By (signature): <i>A. Smith</i>	Turnaround Date Required: Standard	Immediately Packed on Ice:	
	Turnaround	[X] Yes [] No	
Sample Disposal:	Rush: (Expedite Charges Apply)	Field Filtered (if applicable):	
[] Dispose as appropriate	[] Same Day [] Next Day	[] Yes [] No	
[] Return	[] 2 Day [] 3 Day		
[] Archive: _____	[] 4 Day [] 5 Day	Analysis: _____	
[] Hold: _____			

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)
			Date	Time	Date	Time			
220725-C1W-SB01@17.5'-20'	SL	G	7/25/2022	0910				2	G
220725-C1W-SB01@20'-22.5'	SL	G	7/25/2022	0915				2	G
220725-C1W-SB02@10'-15'	SL	G	7/25/2022	0945				2	G
220725-C1W-SB02@15'-17.5'	SL	G	7/25/2022	0950				2	G
220725-C1W-SB03@16'-19'	SL	G	7/25/2022	1020				2	G
220725-C1W-SB03@20'-22.5'	SL	G	7/25/2022	1025				2	G
220725-C1W-SB05@17.5'-20'	SL	G	7/25/2022	1120				2	G
220725-C1W-SB05@22'-25'	SL	G	7/25/2022	1135				2	G
220725-C1W-SB06@12.5'-15'	SL	G	7/25/2022	1220				2	G
220725-C1W-SB06@17.5'-20'	SL	G	7/25/2022	1225				2	G

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Container Preservative Type **										Lab Project Manager:																			
** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____																													
Analyses										Lab Profile/Line:																			
<table><tr><td>Table 915-1 VOCs</td><td>TPH (ORO, GRO, DRO)</td><td>Table 915-1 Metal's</td><td>Table 915-1 PAHs</td><td>pH, SAR, Arsenic</td><td>Boron (Hot Water Soluble Soil)</td><td></td><td></td><td></td><td></td></tr></table>										Table 915-1 VOCs	TPH (ORO, GRO, DRO)	Table 915-1 Metal's	Table 915-1 PAHs	pH, SAR, Arsenic	Boron (Hot Water Soluble Soil)					Lab Sample Receipt Checklist:									
										Table 915-1 VOCs	TPH (ORO, GRO, DRO)	Table 915-1 Metal's	Table 915-1 PAHs	pH, SAR, Arsenic	Boron (Hot Water Soluble Soil)														
Custody Seals Present/Intact Y N NA																													
Custody Signatures Present Y N NA																													
Collector Signature Present Y N NA																													
Bottles Intact Y N NA																													
Correct Bottles Y N NA																													
Sufficient Volume Y N NA																													
Samples Received on Ice Y N NA																													
VOA - Headspace Acceptable Y N NA																													
USDA Regulated Soils Y N NA																													
Samples in Holding Time Y N NA																													
Residual Chlorine Present Y N NA																													
Cl Strips: _____																													
Sample pH Acceptable Y N NA																													
pH Strips: _____																													
Sulfide Present Y N NA																													
Lead Acetate Strips: _____																													
LAB USE ONLY:																													
Lab Sample # / Comments:																													
L1519613																													
Customer Remarks / Special Conditions / Possible Hazards:										LAB Sample Temperature Info:																			
										Temp Blank Received: Y N NA																			
										Therm ID#: _____																			
										Cooler 1 Temp Upon Receipt: _____ oC																			
										Cooler 1 Therm Corr. Factor: _____ oC																			
										Cooler 1 Corrected Temp: _____ oC																			
										Comments:																			
Relinquished by/Company: (Signature) <i>A. Smith</i>										Date/Time:																			
Relinquished by/Company: (Signature)										Date/Time:																			
Relinquished by/Company: (Signature)										Date/Time:																			
										MTJL LAB USE ONLY																			
										Table #:																			
										Acctnum:																			
										Template:																			
										Prelogin:																			
										PM:																			
										PB:																			
										Trip Blank Received: Y N NA																			
										HCL MeOH TSP Other																			
										Non Conformance(s):																			
										YES / NO																			
										Page: _____																			
										of: _____																			

CHAIN-OF-CUSTODY Analytical Request Document <small>Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields</small>										LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here														
Company: Confluence Compliance Companies, LLC.					Billing Information: Info on file					ALL BOLD OUTLINED AREAS are for LAB USE ONLY <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> Container Preservative Type ** Lab Project Manager: </div> <div style="font-size: 0.8em;"> ** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____ </div>														
Address: Info on file					Report To: Chris McKisson																			
Copy To: Chris McKisson, remediation@confluence-cc.com					Email To: info on file																			
Customer Project Name/Number: Pinyon Ridge C-1W					Site Collection Info/Address:																			
State: County/City: Time Zone Collected:					CO / Rio Blanco [] PT [X] MT [] CT [] ET																			
Phone:		Site/Facility ID #: Pinyon Ridge C-1W			Compliance Monitoring?			Container Type: Plastic (P) or Glass (G)			Analyses <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 0.7em;"> Table 915-1 VOCs TPH (ORO, GRO, DRO) Table 915-1 Metals Table 915-1 PAHs pH, SAR, Arsenic Boron (Hot Water Soluble Soil) </div> </div>													
Email:		Purchase Order #:			[] Yes [X] No																			
Collected By (print): Andrew Smith		Quote #:			DW PWS ID #:																			
Collected By (signature): <i>A. Smith</i>		Turnaround Date Required: Standard Turnaround			DW Location Code:																			
Sample Disposal:		Turnaround Date Required: Standard Turnaround			Immediately Packed on Ice:																			
[] Dispose as appropriate		Rush: (Expedite Charges Apply)			[X] Yes [] No			Lab Profile/Line: Lab Sample Receipt Checklist: Custody Seals Present/Intact Y N NA Custody Signatures Present Y N NA Collector Signature Present Y N NA Bottles Intact Y N NA Correct Bottles Y N NA Sufficient Volume Y N NA Samples Received on Ice Y N NA VOA - Headspace Acceptable Y N NA USDA Regulated Soils Y N NA Samples in Holding Time Y N NA Residual Chlorine Present Y N NA Cl Strips: _____ Sample pH Acceptable Y N NA pH Strips: _____ Sulfide Present Y N NA Lead Acetate Strips: _____ LAB USE ONLY: Lab Sample # / Comments: <div style="font-size: 1.5em; font-family: cursive;">L1519613</div>																
[] Return		[] Same Day [] Next Day			Field Filtered (if applicable):																			
[] Archive: _____		[] 2 Day [] 3 Day			[] Yes [] No																			
[] Hold: _____		[] 4 Day [] 5 Day			Analysis: _____																			
* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)																								
Customer Sample ID		Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns															
				Date Time		Date Time																		
220725-C1W-SB07@12.5'-15'		SL	G	7/25/2022 1255					2															
220725-C1W-SB07@15'-17.5'		SL	G	7/25/2022 1300					2															
220725-C1W-SB08@8'-10'		SL	G	7/25/2022 1315					2															
220725-C1W-SB08@12'-14.5'		SL	G	7/25/2022 1320					2															
220725-C1W-SB09@12.5'-15'		SL	G	7/25/2022 1345					2															
220725-C1W-SB09@17'-19.5'		SL	G	7/25/2022 1350					2															
220725-C1W-SB10@12.5'-15'		SL	G	7/25/2022 1410					2															
220725-C1W-SB10@17.5'-19.5'		SL	G	7/25/2022 1415					2															
Customer Remarks / Special Conditions / Possible Hazards:																								
										Type of Ice Used: Wet Blue Dry None					SHORT HOLDS PRESENT (<72 hours): Y N N/A					LAB Sample Temperature Info: Temp Blank Received: Y N NA Therm ID#: _____ Cooler 1 Temp Upon Receipt: _____ °C Cooler 1 Therm Corr. Factor: _____ °C Cooler 1 Corrected Temp: _____ °C Comments: _____				
										Packing Material Used:					Lab Tracking #:									
										Radchem sample(s) screened (<500 cpm): Y N NA					Samples received via: FEDEX UPS Client Courier Pace Courier									
Relinquished by/Company: (Signature) <i>A. Smith</i>			Date/Time:		Received by/Company: (Signature)			Date/Time:		<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> MTJL LAB USE ONLY Table #: _____ Acctnum: _____ Template: _____ Prelogin: _____ PM: _____ PB: _____ </div>														
Relinquished by/Company: (Signature)			Date/Time:		Received by/Company: (Signature)			Date/Time:																
Relinquished by/Company: (Signature)			Date/Time:		Received by/Company: (Signature)			Date/Time:																
										Trip Blank Received: Y N NA HCL MeOH TSP Other					Non Conformance(s): Page: _____ YES / NO of: _____									

CONCOMGJCO L1519613 edits

R3/R4/RX/EX

L1519613-01 through -18: Please delete all analyses **except** GRO, DRONM, PH, SAR, ASG.

Time estimate: oh

Time spent: oh

Members



Chris Ward



Kelly Mercer