May 1, 2023

Erin Clark
Lead Regulatory Coordinator
XTO Energy Inc. (Operator #: 100264)
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Report of Work Completed – Pit and P&A Investigation

COGCC Location Name (ID)	APACHE CANYON-634S67W/6NESE (312120)
Client Location Name	Apache Canyon 6-9V
COGCC Remediation Project Number	22832
Legal Description	NESE Sec. 6 T34S-R67W
Coordinates (Lat/Long)	37.112225 / -104.924301
County	Las Animas County, Colorado

Ms. Clark,

Confluence Compliance Companies, LLC (Confluence) prepared this Report of Work Completed (ROWC) for XTO Energy Inc. (XTO) to document recent site investigation activities associated with the historical pit and plugging and abandonment (P&A) of the well and associated flowlines at the Apache Canyon 6-9V well pad (Location). The Location is 22.7 miles west of Trinidad, Colorado in Las Animas County, as illustrated in the attached Topographic Location Map. Additional information on the Location and the associated remediation project is provided in the title block above, the attached Site Diagrams, and the attached Laboratory Results Summary Table. This ROWC provides background on the Location, methods used to complete the investigation, results of the investigation, and recommendations for how to proceed with this information.

Background

As required by Colorado Oil and Gas Conservation Commission (COGCC) Rule 911.a, XTO submitted an Initial eForm 27 Document 402979959 proposing investigation activities associated with a historical pit and P&A of the well and associated flowline to open Remediation Project Number 22832. All remaining equipment at the Location is associated with Ogris Operating, LLC.

On September 6, 2022, Confluence was tasked with sampling the Location in accordance with COGCC Rule 911.a in support of facility decommissioning. Confluence personnel inspected the wellhead excavation, flowline trenches, equipment footprints, and historical pit area. One soil sample was collected from the wellhead excavation at 3.5 feet below ground surface (bgs), two soil samples were collected beneath the former meter house footprint, three soil samples were collected from the flowline trenches, and six soil samples were collected from the base and sidewalls of the historical pit. Excavated soil was stockpiled on site and composite sampled for characterization.

On October 6, 2022, Confluence returned to the Location to conduct additional site investigation. One soil sample was collected from the base of the historical pit, and one characterization sample was collected from the stockpile on site to recharacterize potential soil impacts. Three soil samples were also collected from nearby, native, non-impacted soil to characterize native levels of inorganic constituents of concern at the Location.

From July 7 to December 1, 2022, Confluence collected several background soil samples over multiple sampling events from nearby, native, non-impacted soil to characterize native levels of inorganic constituents of concern at the Location.

Laboratory results of P&A characterization samples were compliant with COGCC Table 915-1 Residential Soil Screening Levels for all constituents except for pH, arsenic, and hexavalent chromium. Laboratory results of pit characterization samples were compliant with COGCC Table 915-1 Residential Soil Screening Levels for all constituents except for SAR, pH, arsenic, and hexavalent chromium. Laboratory results of background characterization samples exceeded COGCC Table 915-1 Residential Soil Screening Levels for arsenic.

COGCC Form 27 Document 403186127, submitted October 4, 2022, provided results of initial sampling and produced water characterization results to request a reduced analyte list. Based on the analytical results of operator process knowledge, the COGCC approved the removal of arsenic and hexavalent chromium as constituents of concern and approved a reduced analyte list of sodium adsorption ratio (SAR) and pH.

Methodology

On March 14, 2023, Confluence returned to the location to collect additional samples in and around the former location of the wellhead and meter house to delineate pH impacts in support of facility decommissioning. Confluence personnel collected soil samples from 0 feet, 3 feet, and 6 feet bgs at four sample locations. Soil samples were characterized using visual and olfactory observations. All soil samples were collected in laboratory provided jars, immediately placed on ice, shipped under a completed chain-of-custody form to Pace Analytical Services (Pace), and analyzed for pH.

Results

These results summarize observations from onsite investigation efforts and associated field screening results. For organizational and presentation purposes the results summary is divided between general observations of lithology and hydrogeology for the entire Location and investigation activities.

Lithology and Hydrogeology

Lithology at the Location is characterized as silty sand with gravel. Groundwater is expected to flow north toward a dry unnamed drainage feature and ultimately to Trinidad Lake, located 16.4 miles east of the Location. The nearest surface water, an unnamed tributary of the South Fork Purgatoire River, is located approximately 0.65 miles southeast of the Location and sits approximately 63 feet lower in elevation than the Location. Based on this elevation difference, depth to groundwater at the Location is estimated to be greater than 50 feet bgs.

March 2023 Investigation Results

Field screening results did not indicate soil impacts as no hydrocarbon odor or staining were observed. Analytical results of all characterization samples are compliant with COGCC Table 915-1 Residential Soil Screening Levels for pH.

Analysis and Recommendations

Based on the results of site investigation to date, all constituents of concern are within COGCC Table 915-1 Residential Soil Screening Levels except for pH and SAR. SAR impacts remain in the former location of the pit, and pH impacts remain around the former locations of the wellhead and meter house. Although levels of pH and SAR elevated above allowable limits remain in the investigation area, Confluence recommends that XTO request to leave these elevated inorganics in place via a 915.b. Reclamation Plan.

Based on the results of site investigation to date and details included in the attached Reclamation Plan, Confluence recommends that XTO request to close Remediation Project Number 22832 with a no further action determination.

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 us.

Regards,

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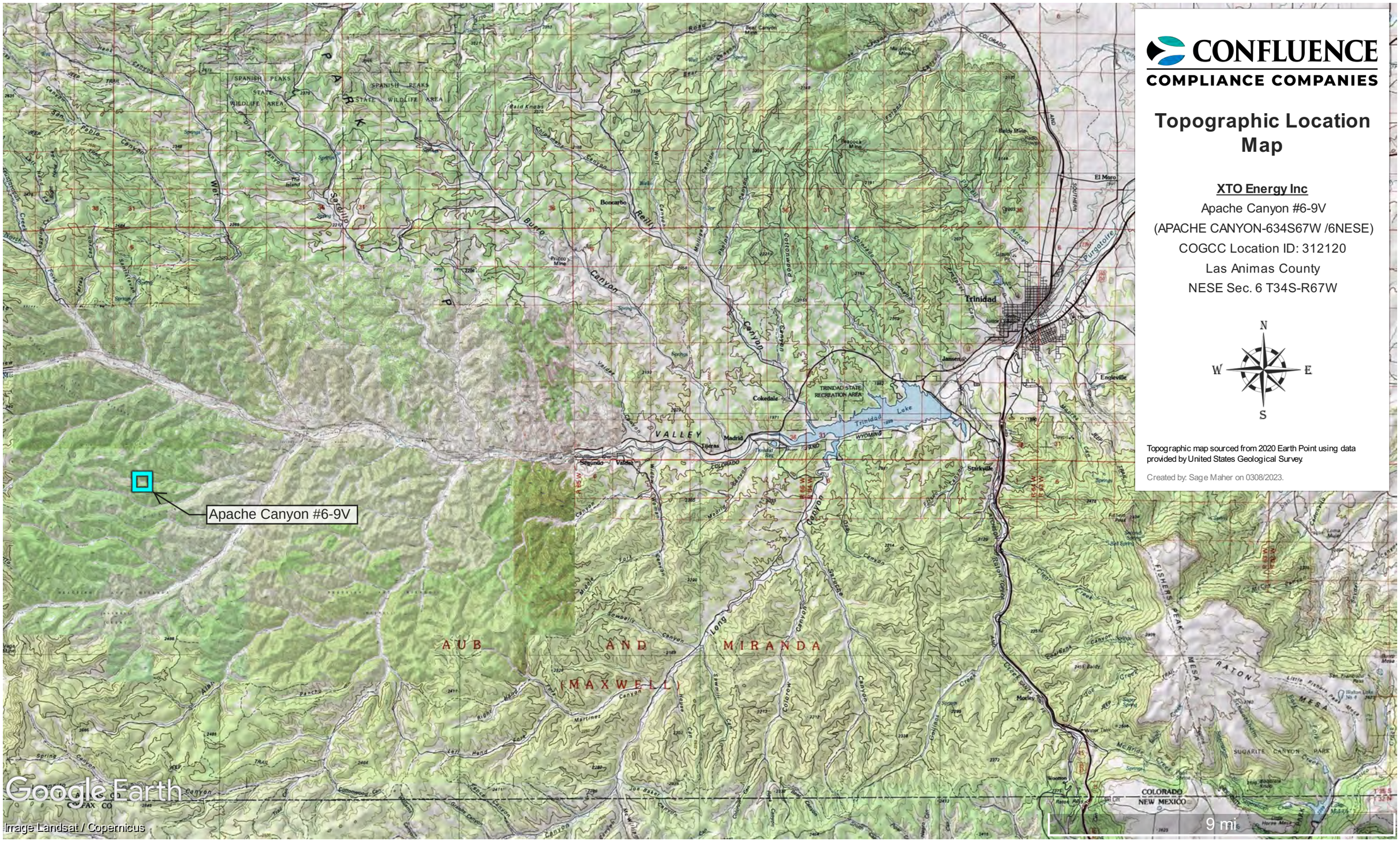
Attachments

- Topographic Location Map
- Site Diagram – Site Investigation
- Site Diagram – Background Investigation
- Laboratory Results Summary Table
- Laboratory Reports
- 915.b. Reclamation Plan



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Topographic Location Map

XTO Energy Inc

Apache Canyon #6-9V

(APACHE CANYON-634S67W /6NESE)

COGCC Location ID: 312120

Las Animas County

NESE Sec. 6 T34S-R67W

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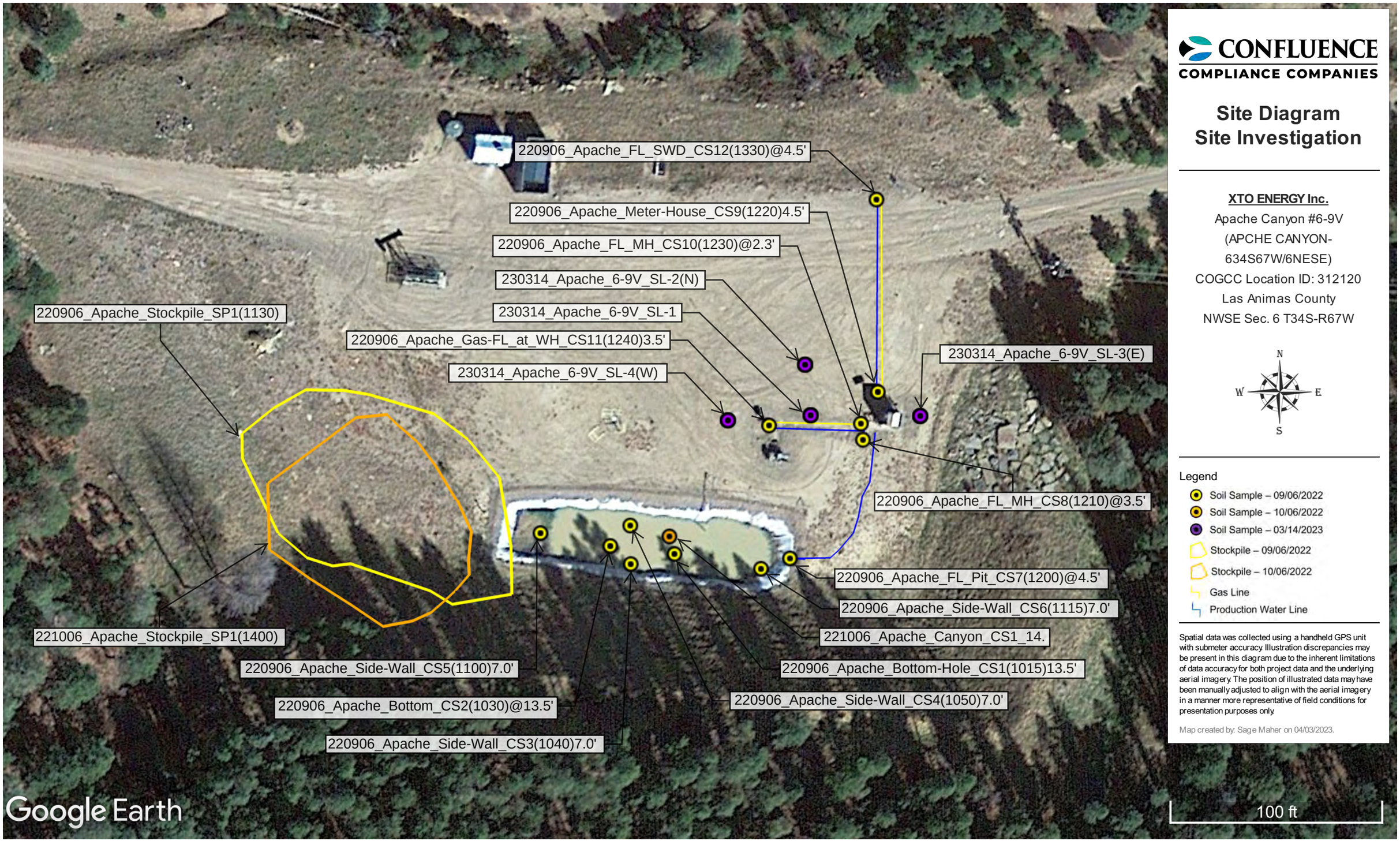
Topographic map sourced from 2020 Earth Point using data provided by United States Geological Survey.

Created by: Sage Maher on 0308/2023.



CONFLUENCE
COMPLIANCE COMPANIES

Site Diagram
Site Investigation

XTO ENERGY Inc.

Apache Canyon #6-9V
(APCHE CANYON-
634S67W/6NESE)
COGCC Location ID: 312120
Las Animas County
NWSE Sec. 6 T34S-R67W

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Legend

- Soil Sample – 09/06/2022
- Soil Sample – 10/06/2022
- Soil Sample – 03/14/2023
- Stockpile – 09/06/2022
- Stockpile – 10/06/2022
- Gas Line
- Production Water Line

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: Sage Maher on 04/03/2023.

CONFLUENCE
COMPLIANCE COMPANIES

Site Diagram Background Investigation

XTO Energy Inc.

Apache Canyon 6-9V
(APACHE CANYON-634S67W/6NESE)
COGCC Location ID: 312120
Las Animas County
NESE Sec. 6 34S67W

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Legend

- Soil Sample – 07/07/2022
- Soil Sample – 10/06/2022
- Soil Sample – 12/01/2022
- Historical Pit Boundary
- Gas Line
- Production Water Line

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: Sage Maher on 3/3/2023.

CONFLUENCE

Laboratory Results Summary Table - Soil
Apache Canyon 6-9V

5/1/2023

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
Location	Sample Date	Solid Refuse Source (Equipment) (Vault/Sump, Separator, Tank Battery, Dump Line, Pit, Comp., Background, etc.)	Depth - Z (feet) (MEGA TIVE VALUE) below ground surface (bgs)	Sample ID	PID (ppm)	TPH (total volatile and extractable petroleum hydrocarbons) (GRO+DRO+ORO)	TPH-GRO (C6-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	Dibenz(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-C,D)pyrene	1- Methylnaphthalene	2- Methylnaphthalene	Naphthalene	Pyrene
Apache Canyon 6-9	3/14/2023	Wellhead	0	230314_Apache_6-9V_SL-1@0'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-1	230314_Apache_6-9V_SL-1@3'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-6	230314_Apache_6-9V_SL-1@6'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	0	230314_Apache_6-9V_SL-2(N)@0'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-3	230314_Apache_6-9V_SL-2(N)@3'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-6	230314_Apache_6-9V_SL-2(N)@6'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	0	230314_Apache_6-9V_SL-4(W)@0'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-3	230314_Apache_6-9V_SL-4(W)@3'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-6	230314_Apache_6-9V_SL-4(W)@6'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Meterhouse	0	230314_Apache_6-9V_SL-3(E)@0'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Meterhouse	-3	230314_Apache_6-9V_SL-3(E)@3'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Meterhouse	-6	230314_Apache_6-9V_SL-3(E)@6'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	10/6/2022	Stockpile	0	221006_Apache_Stockpile_SP1(1400)	2.4	ND	<0.50	<50	<50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	10/6/2022	Pit	-14.5	221006_Apache_Bottom-Hole_CS1(1100)14.5'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	9/6/2022	Pit	-13.5	220906_APACHE_BOTTOM _CS2(1030)13.5'	11.4	117.0	0.109	60.4	56.5	0.00114	0.00904	0.0486	0.3840	0.165	0.0355	0.0141	<0.00600	0.0114	0.00650	0.00993	<0.00600	0.0118	0.00229	0.0107	0.0289	0.00270	0.412	0.822	0.322	0.0121
Apache Canyon 6-9	9/6/2022	Pit	-7	220906_APACHE_SIDE-WALL_CS3(1040)7.0'	14.6	257	0.361	134	123	0.00255	0.00895	0.00232	0.0183	0.00968	0.00395	0.00292	<0.00600	0.00603	0.00380	0.00802	<0.00600	0.00789	<0.00600	0.00579	0.0120	0.00219	0.129	0.227	0.171	0.00823
Apache Canyon 6-9	9/6/2022	Pit	-7	220906_APACHE_SIDE-WALL_CS4(1050)7.0'	8.1	169.9	0.282	86.9	82.7	<0.00100	0.00208	0.00107	0.00445	0.00170	<0.00500	<0.00600	<0.00600	0.00238	<0.00600	0.00546	<0.00600	0.00488	<0.00600	0.00288	<0.00600	<0.00600	0.00887	0.0124	0.0143	0.0031
Apache Canyon 6-9	9/6/2022	Pit	-7	220906_APACHE_SIDE-WALL_CS5(1100)7.0'	1.3	27.8	0.639	13.8	13.4	0.0831	0.0360	0.0245	0.244	0.0405	0.0316	<0.00600	<0.00600	<0.00600	<0.00600	0.00183	<0.00600	0.00261	<0.00600	<0.00600	0.00573	<0.00600	0.0114	0.0297	0.0123	0.00217
Apache Canyon 6-9	9/6/2022	Pit	-7	220906_APACHE_SIDE-WALL_CS6(1115)7.0'	2	21.9	0.0919	11.8	9.99	0.00159	0.0626	0.0117	0.0843	0.0144	0.00490	<0.00600	<0.00600	0.00281	<0.00600	0.00345	<0.00600	0.00372	<0.00600	0.00307	<0.00600	<0.00600	0.0475	0.0809	0.0925	0.00444
Apache Canyon 6-9	9/6/2022	Flowline	-4.5	220906_APACHE_FL_PIT_CS7(1200)@4.5'	0.0	88.1	0.0321	41.1	47.0	<0.00101	<0.00505	<0.00253	0.00131	<0.00505	<0.00505	<0.00600	<0.00600	0.00341	0.00193	0.00647	<0.00600	0.0100	<0.00600	0.00464	<0.00600	<0.00600	0.0273	0.0366	0.0191	0.00702
Apache Canyon 6-9	9/6/2022	Meterhouse	-4.5	220906_APACHE_METER-HOUSE_CS9(1220)4.5'	0.4	4.78	<0.100	2.48	2.30	<0.00101	<0.00505	<0.00253	<0.00656	<0.00505	<0.00505	<0.00600	<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
Apache Canyon 6-9	9/6/2022	Wellhead	-3.5	220906_APACHE_GAS-FL_AT_WH_CS11(1240)3.5	0.0	36.2	<0.100	18.1	18.1	<0.00100	<0.00500	<0.00250	<0.00650	<0.00500	<0.00500	<0.00600	<0.00600	0.00321	0.00276	0.00376	<0.00600	0.00315	<0.00600	<0.00600	<0.00600	0.00200	0.00451	0.00545	<0.0200	0.00615
Apache Canyon 6-9	9/6/2022	Flowline	-4.5	220906_APACHE_FL_SWD_CS12(1330)@4.5'	2.5	9.76	<0.100	4.21	5.55	<0.00100	<0.00500	<0.00250	<0.00650	<0.00500	<0.00500	<0.00600	<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
Apache Canyon 6-9	9/6/2022	Stockpile	0	220906_APACHE_STOCKPILE_SP1(1130)	73.5	638	2.12	440	196	0.00159	0.00364	0.00162	0.00950	0.00457	0.00306	0.00333	<0.00600	0.00333	0.00191	0.00479	<0.00600	0.00665	<0.00600	0.00564	0.00899	0.00198	0.0344	0.0656	0.0241	0.00718
Apache Canyon 6-9	9/6/2022	Pit	-13.5	220906_APACHE_BOTTOM-HOLE_CS1(1015)13.5'	4.6	78.2	0.708	44.2	33.3	0.00110	0.00523	0.00738	0.0771	0.141	0.0394	0.0198	<0.00600	0.0126	0.00778	0.00954	0.00224	0.0161	0.00246	0.0123	0.0340	0.00336	0.493	0.909	0.214	0.0195
Apache Canyon 6-9	9/6/2022	Flowline	-3.5	220906_APACHE_FL_MH_CS8(1210)@3.5'	0.4	6.39	0.137	2.38	3.87	<0.00100	<0.00500	<0.00250	<0.00650	<0.00500	<0.00500	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.00600	<0.0200	0.00654	0.00420	<0.00600
Apache Canyon 6-9	9/6/2022	Flowline	-2.3	220906_APACHE_FL_MH_CS10(1230)@2.3'	0.4	5.14	0.0244	2.52	2.60	<0.00101	<0.00505	<0.00253	<0.00656	<0.00505	<0.00505	<0.00600	<0.00600	0.00243	0.00231	0.00363	<0.00600	0.00283	<0.00600	0.00434	<0.00600	0.00204	<0.0200	<0.0200	<0.0200	0.00441

Confluence Compliance Companies, LLC
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Orange Fill = Exceedance
Dark Gray Italics = Below Reporting Detection Limit (RDL)
"NA" = Not Analyzed
mg/kg = milligrams per kilogram / parts per million

CONFLUENCE

Laboratory Results Summary Table - Soil
Apache Canyon 6-9V

5/1/2023

					Organic Compounds (mg/kg [ppm])																												
Soil Screening and Remediation Limits																																	
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	Soil/Soil Source (Native, Fill) (Wall/Berm, Separator, Tank Battery, Dump Line, Pit, Cuttings, Background, etc.)	Depth - Z (feet) (NEGATIVE VALUE) (below ground surface (bgs))	Sample ID	PID (ppm)	TPH (total volatile and extractable petroleum hydrocarbons) (GRO+DRO+ORO)	TPH-GRO (C6-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	Dibenz(A,H)anthrazene	Fluoranthene	Fluorene	Indeno(1,2,3-C,D)pyrene	1- Methylnaphthalene	2- Methylnaphthalene	Naphthalene	Pyrene			
12/1/2022	Background	-1.0	221201_Apache_Canyon_BG(0940)1.0'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
12/1/2022	Background	-1.0	221201_Apache_Canyon_BG(1005)1.0'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
12/1/2022	Background	-1.0	221201_Apache_Canyon_BG(1020)1.0'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
12/1/2022	Background	-0.5	221201_Apache_Canyon_BG(1025)0.5'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
12/1/2022	Background	-0.5	221201_Apache_Canyon_BG(1035)0.5'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
10/6/2022	Background	-1.25	221006_Apache_Canyon_BG(1205)1.25'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
10/6/2022	Background	-1	221006_Apache_Canyon_BG(1250)1.0'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
10/6/2022	Background	-1.5	221006_Apache_Canyon_BG(1500)1.5'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
7/7/2022	Background	-0.5	220707_APACHE_BG(1515)0.5'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
7/7/2022	Background	-0.5	220707_APACHE_BG(1540)0.5'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
7/7/2022	Background	-0.5	220707_APACHE_BG(1600)0.5'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
7/7/2022	Background	-0.5	220707_APACHE_BG(1610)0.5'	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			

Confluence Compliance Companies, LLC
info@confluence-cc.com

Orange Fill = Exceedance
Dark Gray Italics = Below Reporting Detection Limit (RDL)
"NA" = Not Analyzed
mg/kg = milligrams per kilogram / parts per million

CONFLUENCE

Laboratory Results Summary Table - Soil
Apache Canyon 6-9V

5/1/2023

						Soil Suitability for Reclamation				Metals (mg/kg [ppm])									
Soil Screening and Remediation Limits																			
COGCC Table 915-1 Residential -->					NA	4	6	6-8.3	2	0.68	15000	71	0.3	3100	400	1500	390	390	23000
Location	Sample Date	Solid/Soil Source (Equipment) (Vault/Sump, Separator, Tank Battery, Dump Line, Pit, Cuttings, Background, etc.)	Depth - Z (feet) (NEGATIVE VALUE) below ground surface (bgs.)	Sample ID	PID (ppm)	EC (Specific Conductance) (millimhos/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	Cadmium (mg/kg)	Chromium (VI)	Copper	Lead	Nickel	Selenium	Silver	Zinc
Apache Canyon 6-9	3/14/2023	Wellhead	0	230314_Apache_6-9V_SL-1@0'	NA	NA	NA	7.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-3	230314_Apache_6-9V_SL-1@3'	NA	NA	NA	7.97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-6	230314_Apache_6-9V_SL-1@6'	NA	NA	NA	8.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	0	230314_Apache_6-9V_SL-2(N)@0'	NA	NA	NA	7.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-3	230314_Apache_6-9V_SL-2(N)@3'	NA	NA	NA	7.89	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-6	230314_Apache_6-9V_SL-2(N)@6'	NA	NA	NA	7.99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	0	230314_Apache_6-9V_SL-4(W)@0'	NA	NA	NA	8.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-3	230314_Apache_6-9V_SL-4(W)@3'	NA	NA	NA	7.86	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Wellhead	-6	230314_Apache_6-9V_SL-4(W)@6'	NA	NA	NA	7.87	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Meterhouse	0	230314_Apache_6-9V_SL-3(E)@0'	NA	NA	NA	7.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Meterhouse	-3	230314_Apache_6-9V_SL-3(E)@3'	NA	NA	NA	8.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	3/14/2023	Meterhouse	-6	230314_Apache_6-9V_SL-3(E)@6'	NA	NA	NA	8.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	10/6/2022	Stockpile	0	221006_Apache_Stockpile_SP1(1400)	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	10/6/2022	Pit	-14.5	221006_Apache_Bottom-Hole_CS1(1100)14.5'	NA	NA	17.2	9.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	9/6/2022	Pit	-13.5	220906_APACHE_BOTTOM _CS2(1030)13.5'	11.4	0.280	3.49	8.57	0.110	4.01	222	0.299	<1.00	55.2	20.2	33.6	0.899	<1.00	98.9
Apache Canyon 6-9	9/6/2022	Pit	-7	220906_APACHE_SIDE-WALL_CS3(1040)7.0'	14.6	1.620	3.16	7.58	1.31	2.65	280	<0.500	<1.00	33.6	13.9	15.6	1.68	<1.00	70.7
Apache Canyon 6-9	9/6/2022	Pit	-7	220906_APACHE_SIDE-WALL_CS4(1050)7.0'	8.1	1.480	4.13	8.02	0.228	2.34	310	<0.500	0.530	32.7	13.3	15.9	1.05	<1.00	64.9
Apache Canyon 6-9	9/6/2022	Pit	-7	220906_APACHE_SIDE-WALL_CS5(1100)7.0'	1.3	0.887	5.01	8.26	0.760	3.77	217	0.0807	<1.00	27.7	13.3	16.5	1.70	<1.00	75.1
Apache Canyon 6-9	9/6/2022	Pit	-7	220906_APACHE_SIDE-WALL_CS6(1115)7.0'	2	0.284	5.06	8.86	0.470	2.47	811	<0.500	<1.00	30.1	12.5	14.0	1.02	<1.00	58.4
Apache Canyon 6-9	9/6/2022	Flowline	-4.5	220906_APACHE_FL_PIT_CS7(1200)@4.5'	0.0	0.270	2.64	8.55	0.287	2.89	474	0.0655	<1.00	37.8	17.2	20.1	2.18	<1.00	88.7
Apache Canyon 6-9	9/6/2022	Meterhouse	-4.5	220906_APACHE_METER-HOUSE_CS9(1220)4.5'	0.4	0.112	0.246	7.02	0.217	1.89	147	0.267	<1.00	21.6	10.9	13.7	<2.00	<1.00	53.4
Apache Canyon 6-9	9/6/2022	Wellhead	-3.5	220906_APACHE_GAS-FL_AT_WH_CS11(1240)3.5	0.0	0.374	3.16	8.43	0.204	2.16	246	0.162	0.425	26.7	10.9	14.5	<2.00	<1.00	59.2
Apache Canyon 6-9	9/6/2022	Flowline	-4.5	220906_APACHE_FL_SWD_CS12(1330)@4.5'	2.5	0.248	1.60	8.28	0.137	2.21	244	0.122	0.406	26.4	10.5	13.4	<2.00	<1.00	59.8
Apache Canyon 6-9	9/6/2022	Stockpile	0	220906_APACHE_STOCKPILE_SP1(1130)	73.5	1.310	5.68	7.76	1.17	3.47	324	0.487	<1.00	33.1	13.5	16.9	<2.00	<1.00	82.0
Apache Canyon 6-9	9/6/2022	Pit	-13.5	220906_APACHE_BOTTOM-HOLE_CS1(1015)13.5'	4.6	0.337	8.09	9.12	0.173	29.4	243	0.489	<1.00	53.6	48.7	46.2	<2.00	<1.00	87.9
Apache Canyon 6-9	9/6/2022	Flowline	-3.5	220906_APACHE_FL_MH_CS8(1210)@3.5'	0.4	0.211	1.61	8.44	0.175	2.65	286	0.299	0.562	26.7	13.1	14.7	<2.00	<1.00	56.8
Apache Canyon 6-9	9/6/2022	Flowline	-2.3	220906_APACHE_FL_MH_CS10(1230)@2.3'	0.4	0.300	1.31	8.21	0.153	2.46	251	0.313	0.429	27.4	13.4	15.6	<2.00	<1.00	60.9

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mg/kg = milligrams per kilogram / parts per million

CONFLUENCE

Laboratory Results Summary Table - Soil
Apache Canyon 6-9V

5/1/2023

						Soil Suitability for Reclamation				Metals (mg/kg [ppm])									
Soil Screening and Remediation Limits																			
COGCC Table 915-1 Residential -->					NA	4	6	6-8.3	2	0.68	15000	71	0.3	3100	400	1500	390	390	23000
Location	Sample Date	Solid/Soil Source (Equipment) [Vault/Sump, Separator, Tank Battery, Dump Line, Pit, Cuttings, Background, etc.]	Depth - Z (feet) (NEGATIVE VALUE) below ground surface (bgs.)	Sample ID	PID (ppm)	EC (Specific Conductance) (millimhos/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	Cadmium (mg/kg)	Chromium (VI)	Copper	Lead	Nickel	Selenium	Silver	Zinc
Apache Canyon 6-9	12/1/2022	Background	-1.0	221201_Apache_Canyon_BG(0940)1.0'	NA	NA	0.0286	6.16	NA	0.936	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	12/1/2022	Background	-1.0	221201_Apache_Canyon_BG(1005)1.0'	NA	NA	0.0701	7.43	NA	1.11	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	12/1/2022	Background	-1.0	221201_Apache_Canyon_BG(1020)1.0'	NA	NA	0.0322	7.09	NA	1.75	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	12/1/2022	Background	-0.5	221201_Apache_Canyon_BG(1025)0.5'	NA	NA	0.340	7.82	NA	1.39	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	12/1/2022	Background	-0.5	221201_Apache_Canyon_BG(1035)0.5'	NA	NA	0.0127	6.80	NA	2.28	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	10/6/2022	Background	-1.25	221006_Apache_Canyon_BG(1205)1.25'	NA	0.318	1.64	7.96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	10/6/2022	Background	-1	221006_Apache_Canyon_BG(1250)1.0'	NA	0.162	0.240	7.52	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	10/6/2022	Background	-1.5	221006_Apache_Canyon_BG(1500)1.5'	NA	0.122	0.291	7.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apache Canyon 6-9	7/7/2022	Background	-0.5	220707_APACHE_BG(1515)0.5'	NA	0.0806	0.0531	7.09	0.235	2.55	190	0.221	<1.00	30.9	13.2	13.6	<2.00	<1.00	66.8
Apache Canyon 6-9	7/7/2022	Background	-0.5	220707_APACHE_BG(1540)0.5'	NA	0.0989	0.0484	7.12	0.318	2.31	179	0.240	<1.00	31.1	13.3	15.8	<2.00	<1.00	74.2
Apache Canyon 6-9	7/7/2022	Background	-0.5	220707_APACHE_BG(1600)0.5'	NA	0.147	0.107	7.07	0.378	2.36	189	0.205	<1.00	30.4	12.5	15.2	<2.00	<1.00	70.9
Apache Canyon 6-9	7/7/2022	Background	-0.5	220707_APACHE_BG(1610)0.5'	NA	0.266	0.0783	7.55	0.347	2.69	192	0.306	<1.00	33.1	13.5	15.2	<2.00	<1.00	72.1

Orange Fill = Exceedance
Dark Gray Italics = Below Reporting Detection Limit (RDL)
"NA" = Not Analyzed
mg/kg = milligrams per kilogram / parts per million

Confluence Compliance Companies, LLC
info@confluence-cc.com

ANALYTICAL REPORT

March 17, 2023

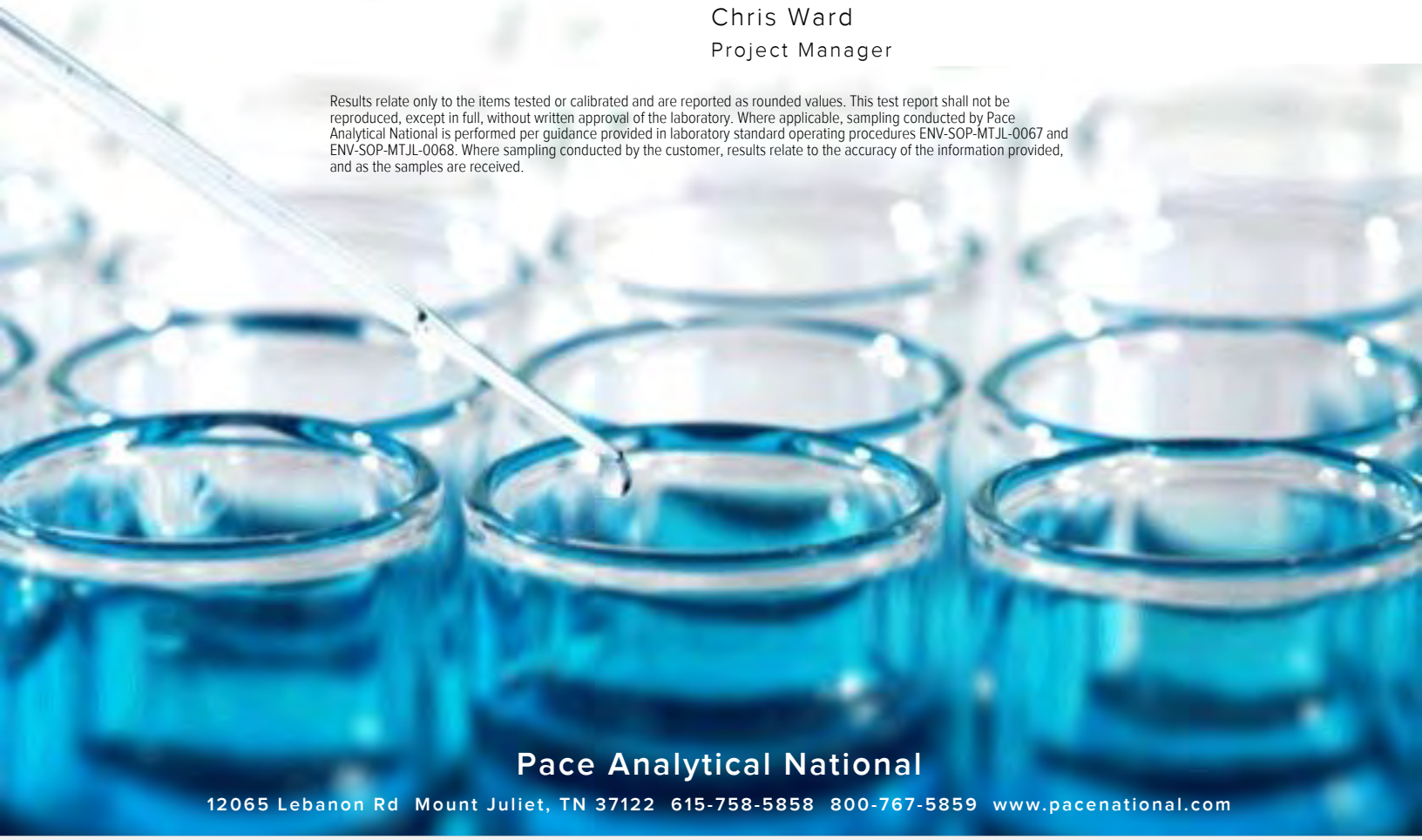
Confluence Compliance Companies - CO

Sample Delivery Group:	L1595360
Samples Received:	03/16/2023
Project Number:	
Description:	Apache Canyon 6-9V

Report To: Chris McKisson
403 ½ Rockwood Lane
Grand Junction, CO 81507

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

230314-APACHE-6-9V-SL-1 @ 0' L1595360-01 Solid

Collected by: Adam Roll | Collected date/time: 03/14/23 13:03 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-1 @ 3' L1595360-02 Solid

Collected by: Adam Roll | Collected date/time: 03/14/23 13:07 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-1 @ 6' L1595360-03 Solid

Collected by: Adam Roll | Collected date/time: 03/14/23 13:10 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-2 (N) @ 0' L1595360-04 Solid

Collected by: Adam Roll | Collected date/time: 03/14/23 13:14 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-2 (N) @ 3' L1595360-05 Solid

Collected by: Adam Roll | Collected date/time: 03/14/23 13:17 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-2 (N) @ 6' L1595360-06 Solid

Collected by: Adam Roll | Collected date/time: 03/14/23 13:20 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-3 (E) @ 0' L1595360-07 Solid

Collected by: Adam Roll | Collected date/time: 03/14/23 13:24 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-3 (E) @ 3' L1595360-08 Solid

Collected by: Adam Roll | Collected date/time: 03/14/23 13:27 | Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

SAMPLE SUMMARY

230314-APACHE-6-9V-SL-3 (E) @ 6' L1595360-09 Solid

Collected by: Adam Roll
Collected date/time: 03/14/23 13:30
Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-4 (W) @ 0' L1595360-10 Solid

Collected by: Adam Roll
Collected date/time: 03/14/23 13:39
Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-4 (W) @ 3' L1595360-11 Solid

Collected by: Adam Roll
Collected date/time: 03/14/23 13:42
Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	Mt. Juliet, TN

230314-APACHE-6-9V-SL-4 (W) @ 6' L1595360-12 Solid

Collected by: Adam Roll
Collected date/time: 03/14/23 13:45
Received date/time: 03/16/23 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9045D	WG2024805	1	03/16/23 20:00	03/16/23 22:34	KAD	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

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.37	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-01 WG2024805: 7.37 at 19.9C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.97	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-02 WG2024805: 7.97 at 20.2C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.30	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-03 WG2024805: 8.3 at 19.6C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.55	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-04 WG2024805: 7.55 at 19.5C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.89	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-05 WG2024805: 7.89 at 19.7C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.99	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-06 WG2024805: 7.99 at 20.1C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.44	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-07 WG2024805: 7.44 at 19.8C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.16	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-08 WG2024805: 8.16 at 19.8C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.18	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-09 WG2024805: 8.18 at 19.5C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	8.05	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-10 WG2024805: 8.05 at 20C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.86	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-11 WG2024805: 7.86 at 20.7C

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	su			date / time	
pH	7.87	T8	1	03/16/2023 22:34	WG2024805

Sample Narrative:

L1595360-12 WG2024805: 7.87 at 20.3C

L1594174-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1594174-02 03/16/23 22:34 • (DUP) R3902071-2 03/16/23 22:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.67	7.69	1	0.260		1

Sample Narrative:

OS: 7.67 at 20.7C

DUP: 7.69 at 20.5C

L1595360-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1595360-04 03/16/23 22:34 • (DUP) R3902071-3 03/16/23 22:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.55	7.49	1	0.798		1

Sample Narrative:

OS: 7.55 at 19.5C

DUP: 7.49 at 19.5C

Laboratory Control Sample (LCS)

(LCS) R3902071-1 03/16/23 22:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10.01 at 19.4C

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

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
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

Pace Analytical

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

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

Company: Confluence	Billing Information: Confluence Compliance Companies
Address: Info on file	Info on file
Report To: [redacted] chris.mckisson@confluence-cc	Email To: Info on file
Copy To: Chris McKisson, remediation@confluence-cc.com	Site Collection Info/Address: NA
Customer Project Name/Number: Apache Canyon 6-9V	State: CO County: Las Animas Time Zone Collected: [ ]PT [X]MT [ ]CT [ ]ET
Phone: Email: NA	Site/Facility ID #: NA
Collected By (print): Adam Roll	Purchase Order # : Quote #: NA
Collected By (signature):	Turnaround Date Required: Next Day
Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day
	Compliance Monitoring? [ ] Yes [X] No
	DW PWS ID #: DW Location Code:
	Immediately Packed on Ice: [X] Yes [ ] No
	Field Filtered (if applicable): [ ] Yes [ ] No Analysis: NA

Container Preservative Type **: NA

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) [illegible] (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

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* 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 Prefix = 230314_Apache_6-9V	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Analyses: [redacted], pH	Lab Profile/Li
SL-1@0'	SL	G	3/14/23	1303				1	P	X	-01
SL-1@3'				1307						X	-02
SL-1@6'				1310						X	-03
SL-2(N)@0'				1314						X	-04
SL-2(N)@3'				1317						X	-05
SL-2(N)@6'				1320						X	-06
SL-3(E)@0'				1324						X	-07
SL-3(E)@3'				1327						X	-08
SL-3(E)@6'				1330						X	-09
SL-4(W)@0'				1339						X	-10

Lab Profile/Li

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: LR595360

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)

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A

Lab Tracking #: 6126 6537 4530

Samples received via: (FEDEX) UPS Client Courier Pace Courier

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:
NSAG
.5+0=.5 12 received

Relinquished by/Company: (Signature) Confluence	Date/Time: 3/15/23 1215	Received by/Company: (Signature)	Date/Time:	MTJL LAB USE ONLY Table #:
Relinquished by/Company: (Signature)	Date/Time: 3/15/23 1400	Received by/Company: (Signature)	Date/Time:	Acctnum: Template: Prelogin:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 3/16/23 0845	PM: PB:

Trip Blank Received: Y (N) NA
HCL MeOH TSP Other

Non Conformance(s): YES / (NO)

Page: 1 of: 2

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

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

Company: [redacted] Confluence	Billing Information: Confluence Compliance Companies Info on file
Address: Info on file	
Report To: [redacted] Chris.McKisson@Confluence-cc.com	Email To: Info on file
Copy To: Chris McKisson, remediation@confluence-cc.com	Site Collection Info/Address: NA
Customer Project Name/Number: Apache Canyon 6-9V	State: CO County/City: Las Animas Time Zone Collected: [ ]PT [X]MT [ ]CT [ ]ET
Phone: NA Email:	Site/Facility ID #: NA
Collected By (print): Adam Roll	Purchase Order # : NA Quote #:
Collected By (signature):	Turnaround Date Required: Next day
Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: (Expedite Charges Apply) [ ] Same Day [X] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day

Compliance Monitoring? [ ] Yes [X] No

DW PWS ID #:

DW Location Code: NA

Immediately Packed on Ice: [X] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: NA

Container Preservative Type **: NA

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: [redacted] pH

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:

* 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 prefix = 230314_Apache_6-9V	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Lab Sample # / Comments
SL-4(W)@[redacted]3'	SL	G	12/14/23	1342				1	P	-11
SL-4(W)@6'	"	"	"	1345				1	P	-12

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)

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A

Lab Tracking #:

Samples received via: (FEDEX) UPS Client Courier Pace Courier

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:
NSHG
0510=-5 12 received

Relinquished by/Company: (Signature) Confluence	Date/Time: 3/15/23/1215	Received by/Company: (Signature)	Date/Time:	MTJL LAB USE ONLY Table #:
Relinquished by/Company: (Signature)	Date/Time: 3/15/23 1400	Received by/Company: (Signature)	Date/Time:	Acctnum: Template: Prelogin: PM: PB:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 3/16/23 0845	

Trip Blank Received: Y (N) NA
HCL MeOH TSP Other

Non Conformance(s): YES / (NO)

Page: 2 of: 2

ANALYTICAL REPORT

April 28, 2023

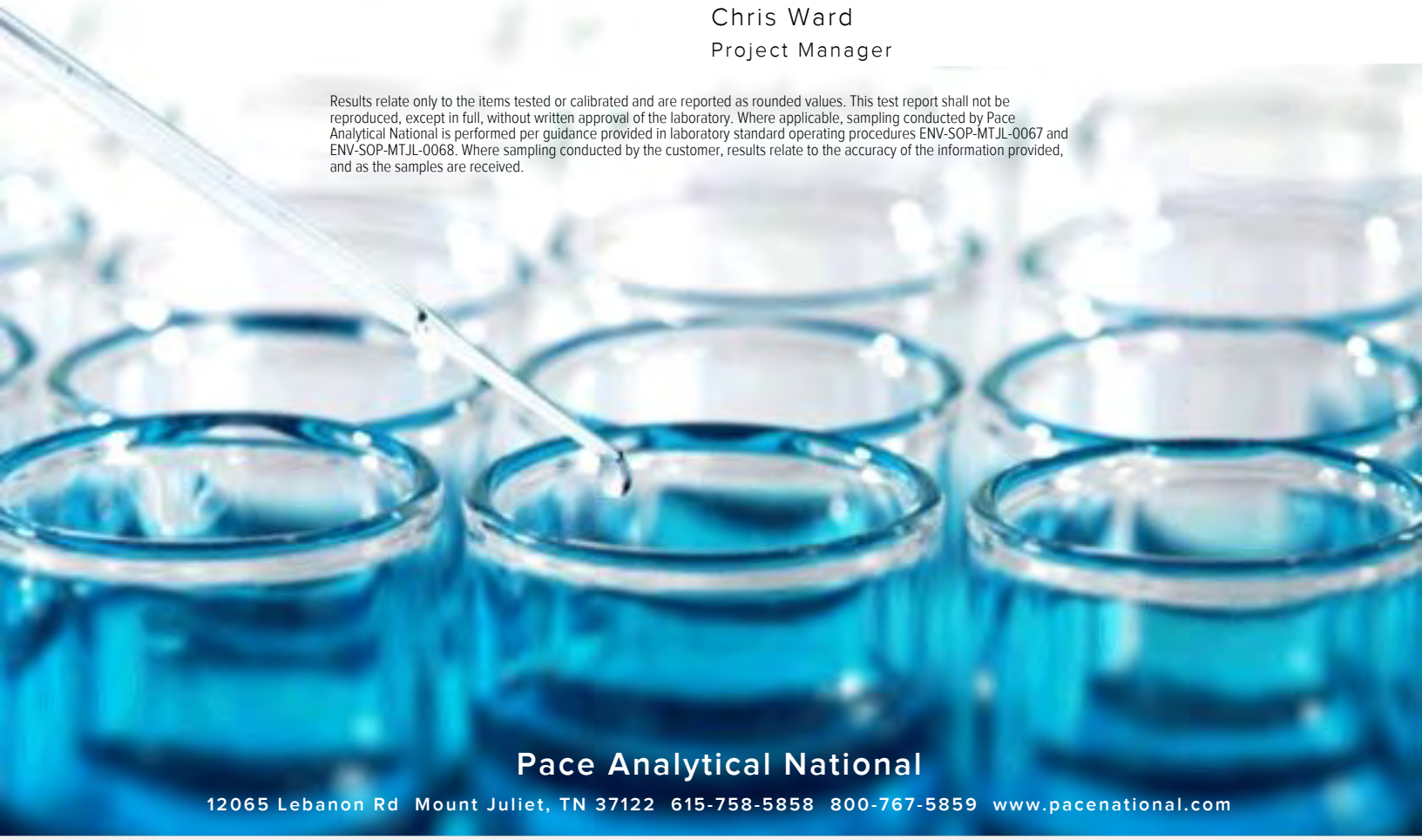
Revised Report

Confluence Compliance Companies - CO

Sample Delivery Group:	L1534450
Samples Received:	09/09/2022
Project Number:	217411
Description:	XTO Apache Canyon
Report To:	Chris McKisson 403 ½ Rockwood Lane Grand Junction, CO 81507

Entire Report Reviewed By:

Chris Ward
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SAMPLE SUMMARY

220906_APACHE_BOTTOM_CS2(1030)@13.5' L1534450-01 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 10:30 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:15	09/20/22 23:15	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/28/22 06:22	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929125	1	09/21/22 10:00	09/21/22 12:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1924910	1	09/19/22 16:49	09/20/22 17:38	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/22/22 00:29	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1924911	5	09/19/22 17:10	09/20/22 14:29	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1.01	09/14/22 16:52	09/15/22 13:44	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927467	1.01	09/14/22 16:52	09/17/22 18:31	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	4	09/16/22 05:11	09/17/22 11:29	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926769	1	09/16/22 08:07	09/16/22 18:10	JRM	Mt. Juliet, TN

220906_APACHE_SIDE-WALL_CS3(1040)7.0' L1534450-02 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 10:40 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:18	09/20/22 23:18	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 13:10	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929125	1	09/21/22 10:00	09/21/22 12:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1925118	1	09/12/22 21:20	09/13/22 13:43	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/22/22 00:26	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1925117	5	09/12/22 21:21	09/13/22 11:46	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 14:04	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927467	1	09/14/22 16:52	09/17/22 18:50	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	4	09/16/22 05:11	09/17/22 12:10	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926769	1	09/16/22 08:07	09/16/22 18:50	JRM	Mt. Juliet, TN

220906_APACHE_SIDE-WALL_CS4(1050)7.0' L1534450-03 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 10:50 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:21	09/20/22 23:21	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 13:15	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929125	1	09/21/22 10:00	09/21/22 12:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1925118	1	09/12/22 21:20	09/13/22 13:46	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/22/22 00:24	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1925117	5	09/12/22 21:21	09/13/22 11:50	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 14:46	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927467	1	09/14/22 16:52	09/17/22 19:09	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	10	09/16/22 05:11	09/17/22 11:56	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926769	1	09/16/22 08:07	09/16/22 17:51	JRM	Mt. Juliet, TN

220906_APACHE_SIDE-WALL_CS5(1100)7.0' L1534450-04 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 11:00 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:23	09/20/22 23:23	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 13:25	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929125	1	09/21/22 10:00	09/21/22 12:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1925118	1	09/12/22 21:20	09/13/22 13:54	ZSA	Mt. Juliet, TN

220906_APACHE_SIDE-WALL_CS5(1100)7.0' L1534450-04 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 11:00 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/22/22 00:21	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1925117	5	09/12/22 21:21	09/13/22 12:03	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 15:07	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927467	1	09/14/22 16:52	09/17/22 19:28	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	1	09/16/22 05:11	09/17/22 11:43	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 17:17	AO	Mt. Juliet, TN

220906_APACHE_SIDE-WALL_CS6(1115)7.0' L1534450-05 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 11:15 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:26	09/20/22 23:26	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 13:30	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929125	1	09/21/22 10:00	09/21/22 12:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1925118	1	09/12/22 21:20	09/13/22 13:58	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/22/22 00:18	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1925117	5	09/12/22 21:21	09/13/22 12:06	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 15:56	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927467	1.01	09/14/22 16:52	09/17/22 19:46	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	1	09/16/22 05:11	09/17/22 10:48	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 15:11	AO	Mt. Juliet, TN

220906_APACHE_FL_PIT_CS7(1200)@4.5' L1534450-06 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 12:00 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:29	09/20/22 23:29	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 13:46	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929125	1	09/21/22 10:00	09/21/22 12:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1925118	1	09/12/22 21:20	09/13/22 14:01	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/22/22 00:15	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1925117	5	09/12/22 21:21	09/13/22 12:09	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 16:29	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927467	1.01	09/14/22 16:52	09/17/22 20:05	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	2	09/16/22 05:11	09/17/22 11:02	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 15:29	AO	Mt. Juliet, TN

220906_APACHE_METER-HOUSE_CS9(1220)4.5' L1534450-07 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 12:20 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:32	09/20/22 23:32	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 13:51	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929125	1	09/21/22 10:00	09/21/22 12:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1926442	1	09/15/22 08:57	09/15/22 17:50	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/22/22 00:32	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1926444	5	09/15/22 08:59	09/15/22 18:51	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 17:01	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927467	1.01	09/14/22 16:52	09/17/22 20:23	JHH	Mt. Juliet, TN

220906_APACHE_METER-HOUSE_CS9(1220)4.5' L1534450-07 Solid

Collected by	Collected date/time	Received date/time
Tim Freeman	09/06/22 12:20	09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	1	09/16/22 05:11	09/16/22 15:52	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 11:37	AO	Mt. Juliet, TN

220906_APACHE_GAS-FL_AT_WH_CS11(1240)3.5 L1534450-08 Solid

Collected by	Collected date/time	Received date/time
Tim Freeman	09/06/22 12:40	09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:34	09/20/22 23:34	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 13:56	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1928926	1	09/20/22 14:00	09/20/22 16:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1924910	1	09/19/22 16:49	09/20/22 17:41	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/22/22 00:35	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1924911	5	09/19/22 17:10	09/20/22 14:32	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 17:22	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927467	1	09/14/22 16:52	09/17/22 20:42	JHH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	1	09/16/22 05:11	09/16/22 16:20	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 15:47	AO	Mt. Juliet, TN

220906_APACHE_FL_SWD_CS12(1330)@4.5' L1534450-09 Solid

Collected by	Collected date/time	Received date/time
Tim Freeman	09/06/22 13:30	09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:37	09/20/22 23:37	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 14:01	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1928926	1	09/20/22 14:00	09/20/22 16:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1924910	1	09/19/22 16:49	09/20/22 17:44	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/21/22 23:27	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1924911	5	09/19/22 17:10	09/20/22 14:36	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 17:42	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927478	1	09/14/22 16:52	09/17/22 08:26	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	1	09/16/22 05:11	09/16/22 16:06	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 16:05	AO	Mt. Juliet, TN

220906_APACHE_STOCKPILE_SP1(1130) L1534450-10 Solid

Collected by	Collected date/time	Received date/time
Tim Freeman	09/06/22 11:40	09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:45	09/20/22 23:45	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 14:07	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929264	1	09/20/22 15:00	09/20/22 17:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927476	1	09/17/22 13:36	09/22/22 12:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1924910	1	09/19/22 16:49	09/20/22 17:46	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1928847	1	09/21/22 14:20	09/21/22 23:30	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1924911	5	09/19/22 17:10	09/20/22 14:39	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 18:31	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927478	1.01	09/14/22 16:52	09/17/22 09:40	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926743	10	09/16/22 05:11	09/17/22 11:16	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 17:53	AO	Mt. Juliet, TN

220906_APACHE_BOTTOM-HOLE_CS1(1015)13.5' L1534450-11 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 10:15 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:48	09/20/22 23:48	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 14:12	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929264	1	09/20/22 15:00	09/20/22 17:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927576	1	09/17/22 13:19	09/23/22 11:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1926442	1	09/15/22 08:57	09/15/22 17:37	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1925597	1	09/14/22 08:31	09/15/22 22:40	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1926444	5	09/15/22 08:59	09/15/22 18:35	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 18:52	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927478	1	09/14/22 16:52	09/17/22 09:59	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926744	1	09/16/22 05:16	09/16/22 13:17	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 17:35	AO	Mt. Juliet, TN

220906_APACHE_FL_MH_CS8(1210)@3.5' L1534450-12 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 12:10 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:51	09/20/22 23:51	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 14:18	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929264	1	09/20/22 15:00	09/20/22 17:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927576	1	09/17/22 13:19	09/23/22 11:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1926442	1	09/15/22 08:57	09/15/22 17:53	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1925597	1	09/14/22 08:31	09/15/22 22:42	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1926444	5	09/15/22 08:59	09/15/22 18:55	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1926632	1	09/14/22 16:52	09/15/22 19:12	AV	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927478	1	09/14/22 16:52	09/17/22 10:19	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926744	1	09/16/22 05:16	09/16/22 17:31	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 16:22	AO	Mt. Juliet, TN

220906_APACHE_FL_MH_CS10(1230)@2.3' L1534450-13 Solid

Collected by: Tim Freeman | Collected date/time: 09/06/22 12:30 | Received date/time: 09/09/22 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1926589	1	09/20/22 23:53	09/20/22 23:53	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1929479	1	09/20/22 20:42	09/23/22 14:25	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1929264	1	09/20/22 15:00	09/20/22 17:00	SGB	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1927576	1	09/17/22 13:19	09/23/22 11:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1926442	1	09/15/22 08:57	09/15/22 17:56	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1925597	1	09/14/22 08:31	09/15/22 22:45	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1926444	5	09/15/22 08:59	09/15/22 18:58	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1927118	1.01	09/14/22 16:52	09/15/22 22:11	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1927478	1.01	09/14/22 16:52	09/17/22 10:38	DWR	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1926744	1	09/16/22 05:16	09/16/22 13:04	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1926770	1	09/16/22 08:12	09/17/22 16:40	AO	Mt. Juliet, TN

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

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

Report Revision History

Level II Report - Version 1: 09/30/22 11:53
Level II Report - Version 2: 09/30/22 15:39

Project Narrative

Rerun for 915 specific list
Reissued 4/28 for updated sample IDs

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	3.49		1	09/20/2022 23:15	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	09/28/2022 06:22	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.57	T8	1	09/21/2022 12:00	WG1929125

Sample Narrative:

L1534450-01 WG1929125: 8.57 at 21.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	280		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-01 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	222		0.0852	0.500	1	09/20/2022 17:38	WG1924910
Cadmium	0.299	J	0.0471	0.500	1	09/20/2022 17:38	WG1924910
Copper	55.2		0.400	2.00	1	09/20/2022 17:38	WG1924910
Lead	20.2		0.208	0.500	1	09/20/2022 17:38	WG1924910
Nickel	33.6		0.132	2.00	1	09/20/2022 17:38	WG1924910
Selenium	0.899	J	0.764	2.00	1	09/20/2022 17:38	WG1924910
Silver	U		0.127	1.00	1	09/20/2022 17:38	WG1924910
Zinc	98.9		0.832	5.00	1	09/20/2022 17:38	WG1924910

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.110	J	0.0167	0.200	1	09/22/2022 00:29	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	4.01		0.100	1.00	5	09/20/2022 14:29	WG1924911

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.109		0.0219	0.101	1.01	09/15/2022 13:44	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*90.0*			*77.0-120*		*09/15/2022 13:44*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00114		0.000472	0.00101	1.01	09/17/2022 18:31	WG1927467
Toluene	0.00904		0.00131	0.00505	1.01	09/17/2022 18:31	WG1927467
Ethylbenzene	0.0486		0.000744	0.00253	1.01	09/17/2022 18:31	WG1927467
Xylenes, Total	0.384		0.000889	0.00656	1.01	09/17/2022 18:31	WG1927467
1,2,4-Trimethylbenzene	0.165		0.00160	0.00505	1.01	09/17/2022 18:31	WG1927467
1,3,5-Trimethylbenzene	0.0355		0.00202	0.00505	1.01	09/17/2022 18:31	WG1927467
(S) Toluene-d8	*114*			*75.0-131*		*09/17/2022 18:31*	WG1927467
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*09/17/2022 18:31*	WG1927467
(S) 1,2-Dichloroethane-d4	*86.7*			*70.0-130*		*09/17/2022 18:31*	WG1927467

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	60.4		6.44	16.0	4	09/17/2022 11:29	WG1926743
C28-C36 Motor Oil Range	56.5		1.10	16.0	4	09/17/2022 11:29	WG1926743
(S) o-Terphenyl	*58.0*			*18.0-148*		*09/17/2022 11:29*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/16/2022 18:10	WG1926769
Acenaphthene	0.0141		0.00209	0.00600	1	09/16/2022 18:10	WG1926769
Benzo(a)anthracene	0.0114		0.00173	0.00600	1	09/16/2022 18:10	WG1926769
Benzo(a)pyrene	0.00650		0.00179	0.00600	1	09/16/2022 18:10	WG1926769
Benzo(b)fluoranthene	0.00993		0.00153	0.00600	1	09/16/2022 18:10	WG1926769
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/16/2022 18:10	WG1926769
Chrysene	0.0118		0.00232	0.00600	1	09/16/2022 18:10	WG1926769
Dibenz(a,h)anthracene	0.00229	J	0.00172	0.00600	1	09/16/2022 18:10	WG1926769
Fluoranthene	0.0107		0.00227	0.00600	1	09/16/2022 18:10	WG1926769
Fluorene	0.0289		0.00205	0.00600	1	09/16/2022 18:10	WG1926769
Indeno(1,2,3-cd)pyrene	0.00270	J	0.00181	0.00600	1	09/16/2022 18:10	WG1926769
Naphthalene	0.322		0.00408	0.0200	1	09/16/2022 18:10	WG1926769
Pyrene	0.0121		0.00200	0.00600	1	09/16/2022 18:10	WG1926769
1-Methylnaphthalene	0.412		0.00449	0.0200	1	09/16/2022 18:10	WG1926769
2-Methylnaphthalene	0.822		0.00427	0.0200	1	09/16/2022 18:10	WG1926769
(S) p-Terphenyl-d14	*63.6*			*23.0-120*		*09/16/2022 18:10*	WG1926769
(S) Nitrobenzene-d5	*84.6*			*14.0-149*		*09/16/2022 18:10*	WG1926769
(S) 2-Fluorobiphenyl	*63.3*			*34.0-125*		*09/16/2022 18:10*	WG1926769

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	3.16		1	09/20/2022 23:18	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	09/23/2022 13:10	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.58	T8	1	09/21/2022 12:00	WG1929125

Sample Narrative:

L1534450-02 WG1929125: 7.58 at 21.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1620		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-02 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	280		0.0852	0.500	1	09/13/2022 13:43	WG1925118
Cadmium	U		0.0471	0.500	1	09/13/2022 13:43	WG1925118
Copper	33.6		0.400	2.00	1	09/13/2022 13:43	WG1925118
Lead	13.9		0.208	0.500	1	09/13/2022 13:43	WG1925118
Nickel	15.6		0.132	2.00	1	09/13/2022 13:43	WG1925118
Selenium	1.68	J	0.764	2.00	1	09/13/2022 13:43	WG1925118
Silver	U		0.127	1.00	1	09/13/2022 13:43	WG1925118
Zinc	70.7		0.832	5.00	1	09/13/2022 13:43	WG1925118

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	1.31		0.0167	0.200	1	09/22/2022 00:26	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.65		0.100	1.00	5	09/13/2022 11:46	WG1925117

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.361		0.0217	0.100	1	09/15/2022 14:04	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*93.3*			*77.0-120*		*09/15/2022 14:04*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00255		0.000467	0.00100	1	09/17/2022 18:50	WG1927467
Toluene	0.00895		0.00130	0.00500	1	09/17/2022 18:50	WG1927467
Ethylbenzene	0.00232	J	0.000737	0.00250	1	09/17/2022 18:50	WG1927467
Xylenes, Total	0.0183		0.000880	0.00650	1	09/17/2022 18:50	WG1927467
1,2,4-Trimethylbenzene	0.00968		0.00158	0.00500	1	09/17/2022 18:50	WG1927467
1,3,5-Trimethylbenzene	0.00395	J	0.00200	0.00500	1	09/17/2022 18:50	WG1927467
(S) Toluene-d8	*120*			*75.0-131*		*09/17/2022 18:50*	WG1927467
(S) 4-Bromofluorobenzene	*97.3*			*67.0-138*		*09/17/2022 18:50*	WG1927467
(S) 1,2-Dichloroethane-d4	*73.6*			*70.0-130*		*09/17/2022 18:50*	WG1927467

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	134		6.44	16.0	4	09/17/2022 12:10	WG1926743
C28-C36 Motor Oil Range	123		1.10	16.0	4	09/17/2022 12:10	WG1926743
(S) o-Terphenyl	*73.2*			*18.0-148*		*09/17/2022 12:10*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/16/2022 18:50	WG1926769
Acenaphthene	0.00292	J	0.00209	0.00600	1	09/16/2022 18:50	WG1926769
Benzo(a)anthracene	0.00603		0.00173	0.00600	1	09/16/2022 18:50	WG1926769
Benzo(a)pyrene	0.00380	J	0.00179	0.00600	1	09/16/2022 18:50	WG1926769
Benzo(b)fluoranthene	0.00802		0.00153	0.00600	1	09/16/2022 18:50	WG1926769
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/16/2022 18:50	WG1926769
Chrysene	0.00789		0.00232	0.00600	1	09/16/2022 18:50	WG1926769
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/16/2022 18:50	WG1926769
Fluoranthene	0.00679		0.00227	0.00600	1	09/16/2022 18:50	WG1926769
Fluorene	0.0120		0.00205	0.00600	1	09/16/2022 18:50	WG1926769
Indeno(1,2,3-cd)pyrene	0.00219	J	0.00181	0.00600	1	09/16/2022 18:50	WG1926769
Naphthalene	0.171		0.00408	0.0200	1	09/16/2022 18:50	WG1926769
Pyrene	0.00823		0.00200	0.00600	1	09/16/2022 18:50	WG1926769
1-Methylnaphthalene	0.129		0.00449	0.0200	1	09/16/2022 18:50	WG1926769
2-Methylnaphthalene	0.227		0.00427	0.0200	1	09/16/2022 18:50	WG1926769
(S) p-Terphenyl-d14	*59.6*			*23.0-120*		*09/16/2022 18:50*	WG1926769
(S) Nitrobenzene-d5	*121*			*14.0-149*		*09/16/2022 18:50*	WG1926769
(S) 2-Fluorobiphenyl	*58.7*			*34.0-125*		*09/16/2022 18:50*	WG1926769

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	4.13		1	09/20/2022 23:21	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.530	J	0.255	1.00	1	09/23/2022 13:15	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.02	T8	1	09/21/2022 12:00	WG1929125

Sample Narrative:

L1534450-03 WG1929125: 8.02 at 21.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1480		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-03 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	310		0.0852	0.500	1	09/13/2022 13:46	WG1925118
Cadmium	U		0.0471	0.500	1	09/13/2022 13:46	WG1925118
Copper	32.7		0.400	2.00	1	09/13/2022 13:46	WG1925118
Lead	13.3		0.208	0.500	1	09/13/2022 13:46	WG1925118
Nickel	15.9		0.132	2.00	1	09/13/2022 13:46	WG1925118
Selenium	1.05	J	0.764	2.00	1	09/13/2022 13:46	WG1925118
Silver	U		0.127	1.00	1	09/13/2022 13:46	WG1925118
Zinc	64.9		0.832	5.00	1	09/13/2022 13:46	WG1925118

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.228		0.0167	0.200	1	09/22/2022 00:24	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.34		0.100	1.00	5	09/13/2022 11:50	WG1925117

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.282		0.0217	0.100	1	09/15/2022 14:46	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*93.0*			*77.0-120*		*09/15/2022 14:46*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	09/17/2022 19:09	WG1927467
Toluene	0.00208	J	0.00130	0.00500	1	09/17/2022 19:09	WG1927467
Ethylbenzene	0.00107	J	0.000737	0.00250	1	09/17/2022 19:09	WG1927467
Xylenes, Total	0.00445	J	0.000880	0.00650	1	09/17/2022 19:09	WG1927467
1,2,4-Trimethylbenzene	0.00170	J	0.00158	0.00500	1	09/17/2022 19:09	WG1927467
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	09/17/2022 19:09	WG1927467
(S) Toluene-d8	*119*			*75.0-131*		*09/17/2022 19:09*	WG1927467
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*09/17/2022 19:09*	WG1927467
(S) 1,2-Dichloroethane-d4	*78.6*			*70.0-130*		*09/17/2022 19:09*	WG1927467

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	86.9		16.1	40.0	10	09/17/2022 11:56	WG1926743
C28-C36 Motor Oil Range	82.7		2.74	40.0	10	09/17/2022 11:56	WG1926743
(S) o-Terphenyl	*79.6*			*18.0-148*		*09/17/2022 11:56*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/16/2022 17:51	WG1926769
Acenaphthene	U		0.00209	0.00600	1	09/16/2022 17:51	WG1926769
Benzo(a)anthracene	0.00238	J	0.00173	0.00600	1	09/16/2022 17:51	WG1926769
Benzo(a)pyrene	U		0.00179	0.00600	1	09/16/2022 17:51	WG1926769
Benzo(b)fluoranthene	0.00646		0.00153	0.00600	1	09/16/2022 17:51	WG1926769
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/16/2022 17:51	WG1926769
Chrysene	0.00488	J	0.00232	0.00600	1	09/16/2022 17:51	WG1926769
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/16/2022 17:51	WG1926769
Fluoranthene	0.00288	J	0.00227	0.00600	1	09/16/2022 17:51	WG1926769
Fluorene	U		0.00205	0.00600	1	09/16/2022 17:51	WG1926769
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	09/16/2022 17:51	WG1926769
Naphthalene	0.0143	J	0.00408	0.0200	1	09/16/2022 17:51	WG1926769
Pyrene	0.00310	J	0.00200	0.00600	1	09/16/2022 17:51	WG1926769
1-Methylnaphthalene	0.00887	J	0.00449	0.0200	1	09/16/2022 17:51	WG1926769
2-Methylnaphthalene	0.0124	J	0.00427	0.0200	1	09/16/2022 17:51	WG1926769
(S) p-Terphenyl-d14	*57.5*			*23.0-120*		*09/16/2022 17:51*	WG1926769
(S) Nitrobenzene-d5	*86.4*			*14.0-149*		*09/16/2022 17:51*	WG1926769
(S) 2-Fluorobiphenyl	*60.8*			*34.0-125*		*09/16/2022 17:51*	WG1926769

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.01		1	09/20/2022 23:23	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	09/23/2022 13:25	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.26	T8	1	09/21/2022 12:00	WG1929125

Sample Narrative:

L1534450-04 WG1929125: 8.26 at 21.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	887		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-04 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	217		0.0852	0.500	1	09/13/2022 13:54	WG1925118
Cadmium	0.0807	J	0.0471	0.500	1	09/13/2022 13:54	WG1925118
Copper	27.7		0.400	2.00	1	09/13/2022 13:54	WG1925118
Lead	13.3		0.208	0.500	1	09/13/2022 13:54	WG1925118
Nickel	16.5		0.132	2.00	1	09/13/2022 13:54	WG1925118
Selenium	1.70	J	0.764	2.00	1	09/13/2022 13:54	WG1925118
Silver	U		0.127	1.00	1	09/13/2022 13:54	WG1925118
Zinc	75.1		0.832	5.00	1	09/13/2022 13:54	WG1925118

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.760		0.0167	0.200	1	09/22/2022 00:21	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.77		0.100	1.00	5	09/13/2022 12:03	WG1925117

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.639		0.0217	0.100	1	09/15/2022 15:07	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*81.5*			*77.0-120*		*09/15/2022 15:07*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.0831		0.000467	0.00100	1	09/17/2022 19:28	WG1927467
Toluene	0.0360		0.00130	0.00500	1	09/17/2022 19:28	WG1927467
Ethylbenzene	0.0245		0.000737	0.00250	1	09/17/2022 19:28	WG1927467
Xylenes, Total	0.244		0.000880	0.00650	1	09/17/2022 19:28	WG1927467
1,2,4-Trimethylbenzene	0.0405		0.00158	0.00500	1	09/17/2022 19:28	WG1927467
1,3,5-Trimethylbenzene	0.0316		0.00200	0.00500	1	09/17/2022 19:28	WG1927467
(S) Toluene-d8	*116*			*75.0-131*		*09/17/2022 19:28*	WG1927467
(S) 4-Bromofluorobenzene	*97.9*			*67.0-138*		*09/17/2022 19:28*	WG1927467
(S) 1,2-Dichloroethane-d4	*86.2*			*70.0-130*		*09/17/2022 19:28*	WG1927467

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	13.8		1.61	4.00	1	09/17/2022 11:43	WG1926743
C28-C36 Motor Oil Range	13.4		0.274	4.00	1	09/17/2022 11:43	WG1926743
(S) o-Terphenyl	*36.6*			*18.0-148*		*09/17/2022 11:43*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 17:17	WG1926770
Acenaphthene	U		0.00209	0.00600	1	09/17/2022 17:17	WG1926770
Benzo(a)anthracene	U		0.00173	0.00600	1	09/17/2022 17:17	WG1926770
Benzo(a)pyrene	U		0.00179	0.00600	1	09/17/2022 17:17	WG1926770
Benzo(b)fluoranthene	0.00183	J	0.00153	0.00600	1	09/17/2022 17:17	WG1926770
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/17/2022 17:17	WG1926770
Chrysene	0.00261	J	0.00232	0.00600	1	09/17/2022 17:17	WG1926770
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/17/2022 17:17	WG1926770
Fluoranthene	U		0.00227	0.00600	1	09/17/2022 17:17	WG1926770
Fluorene	0.00573	J	0.00205	0.00600	1	09/17/2022 17:17	WG1926770
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	09/17/2022 17:17	WG1926770
Naphthalene	0.0123	J	0.00408	0.0200	1	09/17/2022 17:17	WG1926770
Pyrene	0.00217	J	0.00200	0.00600	1	09/17/2022 17:17	WG1926770
1-Methylnaphthalene	0.0114	J	0.00449	0.0200	1	09/17/2022 17:17	WG1926770
2-Methylnaphthalene	0.0297		0.00427	0.0200	1	09/17/2022 17:17	WG1926770
(S) p-Terphenyl-d14	*71.3*			*23.0-120*		*09/17/2022 17:17*	WG1926770
(S) Nitrobenzene-d5	*91.4*			*14.0-149*		*09/17/2022 17:17*	WG1926770
(S) 2-Fluorobiphenyl	*71.2*			*34.0-125*		*09/17/2022 17:17*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.06		1	09/20/2022 23:26	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	09/23/2022 13:30	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.86	T8	1	09/21/2022 12:00	WG1929125

Sample Narrative:

L1534450-05 WG1929125: 8.86 at 22.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	284		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-05 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	811		0.0852	0.500	1	09/13/2022 13:58	WG1925118
Cadmium	U		0.0471	0.500	1	09/13/2022 13:58	WG1925118
Copper	30.1		0.400	2.00	1	09/13/2022 13:58	WG1925118
Lead	12.5		0.208	0.500	1	09/13/2022 13:58	WG1925118
Nickel	14.0		0.132	2.00	1	09/13/2022 13:58	WG1925118
Selenium	1.02	J	0.764	2.00	1	09/13/2022 13:58	WG1925118
Silver	U		0.127	1.00	1	09/13/2022 13:58	WG1925118
Zinc	58.4		0.832	5.00	1	09/13/2022 13:58	WG1925118

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.470		0.0167	0.200	1	09/22/2022 00:18	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.47		0.100	1.00	5	09/13/2022 12:06	WG1925117

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0919	J	0.0217	0.100	1	09/15/2022 15:56	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*91.1*			*77.0-120*		*09/15/2022 15:56*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00159		0.000472	0.00101	1.01	09/17/2022 19:46	WG1927467
Toluene	0.0626		0.00131	0.00505	1.01	09/17/2022 19:46	WG1927467
Ethylbenzene	0.0117		0.000744	0.00253	1.01	09/17/2022 19:46	WG1927467
Xylenes, Total	0.0843		0.000889	0.00656	1.01	09/17/2022 19:46	WG1927467
1,2,4-Trimethylbenzene	0.0144		0.00160	0.00505	1.01	09/17/2022 19:46	WG1927467
1,3,5-Trimethylbenzene	0.00490	J	0.00202	0.00505	1.01	09/17/2022 19:46	WG1927467
(S) Toluene-d8	*114*			*75.0-131*		*09/17/2022 19:46*	WG1927467
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*09/17/2022 19:46*	WG1927467
(S) 1,2-Dichloroethane-d4	*84.7*			*70.0-130*		*09/17/2022 19:46*	WG1927467

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	11.8		1.61	4.00	1	09/17/2022 10:48	WG1926743
C28-C36 Motor Oil Range	9.99		0.274	4.00	1	09/17/2022 10:48	WG1926743
(S) o-Terphenyl	*43.1*			*18.0-148*		*09/17/2022 10:48*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 15:11	WG1926770
Acenaphthene	U		0.00209	0.00600	1	09/17/2022 15:11	WG1926770
Benzo(a)anthracene	0.00281	J	0.00173	0.00600	1	09/17/2022 15:11	WG1926770
Benzo(a)pyrene	U		0.00179	0.00600	1	09/17/2022 15:11	WG1926770
Benzo(b)fluoranthene	0.00345	J	0.00153	0.00600	1	09/17/2022 15:11	WG1926770
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/17/2022 15:11	WG1926770
Chrysene	0.00372	J	0.00232	0.00600	1	09/17/2022 15:11	WG1926770
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/17/2022 15:11	WG1926770
Fluoranthene	0.00307	J	0.00227	0.00600	1	09/17/2022 15:11	WG1926770
Fluorene	U		0.00205	0.00600	1	09/17/2022 15:11	WG1926770
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	09/17/2022 15:11	WG1926770
Naphthalene	0.0925		0.00408	0.0200	1	09/17/2022 15:11	WG1926770
Pyrene	0.00444	J	0.00200	0.00600	1	09/17/2022 15:11	WG1926770
1-Methylnaphthalene	0.0475		0.00449	0.0200	1	09/17/2022 15:11	WG1926770
2-Methylnaphthalene	0.0809		0.00427	0.0200	1	09/17/2022 15:11	WG1926770
(S) p-Terphenyl-d14	*69.5*			*23.0-120*		*09/17/2022 15:11*	WG1926770
(S) Nitrobenzene-d5	*70.1*			*14.0-149*		*09/17/2022 15:11*	WG1926770
(S) 2-Fluorobiphenyl	*66.7*			*34.0-125*		*09/17/2022 15:11*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	2.64		1	09/20/2022 23:29	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	09/23/2022 13:46	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.55	T8	1	09/21/2022 12:00	WG1929125

Sample Narrative:

L1534450-06 WG1929125: 8.55 at 21.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	270		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-06 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	474		0.0852	0.500	1	09/13/2022 14:01	WG1925118
Cadmium	0.0655	J	0.0471	0.500	1	09/13/2022 14:01	WG1925118
Copper	37.8		0.400	2.00	1	09/13/2022 14:01	WG1925118
Lead	17.2		0.208	0.500	1	09/13/2022 14:01	WG1925118
Nickel	20.1		0.132	2.00	1	09/13/2022 14:01	WG1925118
Selenium	2.18		0.764	2.00	1	09/13/2022 14:01	WG1925118
Silver	U		0.127	1.00	1	09/13/2022 14:01	WG1925118
Zinc	88.7		0.832	5.00	1	09/13/2022 14:01	WG1925118

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.287		0.0167	0.200	1	09/22/2022 00:15	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.89		0.100	1.00	5	09/13/2022 12:09	WG1925117

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0321	J	0.0217	0.100	1	09/15/2022 16:29	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*91.0*			*77.0-120*		*09/15/2022 16:29*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000472	0.00101	1.01	09/17/2022 20:05	WG1927467
Toluene	U		0.00131	0.00505	1.01	09/17/2022 20:05	WG1927467
Ethylbenzene	U		0.000744	0.00253	1.01	09/17/2022 20:05	WG1927467
Xylenes, Total	0.00131	J	0.000889	0.00656	1.01	09/17/2022 20:05	WG1927467
1,2,4-Trimethylbenzene	U		0.00160	0.00505	1.01	09/17/2022 20:05	WG1927467
1,3,5-Trimethylbenzene	U		0.00202	0.00505	1.01	09/17/2022 20:05	WG1927467
(S) Toluene-d8	*114*			*75.0-131*		*09/17/2022 20:05*	WG1927467
(S) 4-Bromofluorobenzene	*99.1*			*67.0-138*		*09/17/2022 20:05*	WG1927467
(S) 1,2-Dichloroethane-d4	*89.0*			*70.0-130*		*09/17/2022 20:05*	WG1927467

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	41.1		3.22	8.00	2	09/17/2022 11:02	WG1926743
C28-C36 Motor Oil Range	47.0		0.548	8.00	2	09/17/2022 11:02	WG1926743
(S) o-Terphenyl	*53.1*			*18.0-148*		*09/17/2022 11:02*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 15:29	WG1926770
Acenaphthene	U		0.00209	0.00600	1	09/17/2022 15:29	WG1926770
Benzo(a)anthracene	0.00341	J	0.00173	0.00600	1	09/17/2022 15:29	WG1926770
Benzo(a)pyrene	0.00193	J	0.00179	0.00600	1	09/17/2022 15:29	WG1926770
Benzo(b)fluoranthene	0.00647		0.00153	0.00600	1	09/17/2022 15:29	WG1926770
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/17/2022 15:29	WG1926770
Chrysene	0.0100		0.00232	0.00600	1	09/17/2022 15:29	WG1926770
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/17/2022 15:29	WG1926770
Fluoranthene	0.00464	J	0.00227	0.00600	1	09/17/2022 15:29	WG1926770
Fluorene	U		0.00205	0.00600	1	09/17/2022 15:29	WG1926770
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	09/17/2022 15:29	WG1926770
Naphthalene	0.0191	J	0.00408	0.0200	1	09/17/2022 15:29	WG1926770
Pyrene	0.00702		0.00200	0.00600	1	09/17/2022 15:29	WG1926770
1-Methylnaphthalene	0.0273		0.00449	0.0200	1	09/17/2022 15:29	WG1926770
2-Methylnaphthalene	0.0366		0.00427	0.0200	1	09/17/2022 15:29	WG1926770
(S) p-Terphenyl-d14	*87.8*			*23.0-120*		*09/17/2022 15:29*	WG1926770
(S) Nitrobenzene-d5	*93.7*			*14.0-149*		*09/17/2022 15:29*	WG1926770
(S) 2-Fluorobiphenyl	*88.4*			*34.0-125*		*09/17/2022 15:29*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	0.246		1	09/20/2022 23:32	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	09/23/2022 13:51	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.02	T8	1	09/21/2022 12:00	WG1929125

Sample Narrative:

L1534450-07 WG1929125: 7.02 at 21.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	112		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-07 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	147		0.0852	0.500	1	09/15/2022 17:50	WG1926442
Cadmium	0.267	J	0.0471	0.500	1	09/15/2022 17:50	WG1926442
Copper	21.6		0.400	2.00	1	09/15/2022 17:50	WG1926442
Lead	10.9		0.208	0.500	1	09/15/2022 17:50	WG1926442
Nickel	13.7		0.132	2.00	1	09/15/2022 17:50	WG1926442
Selenium	U		0.764	2.00	1	09/15/2022 17:50	WG1926442
Silver	U		0.127	1.00	1	09/15/2022 17:50	WG1926442
Zinc	53.4		0.832	5.00	1	09/15/2022 17:50	WG1926442

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.217		0.0167	0.200	1	09/22/2022 00:32	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.89		0.100	1.00	5	09/15/2022 18:51	WG1926444

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	09/15/2022 17:01	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*95.1*			*77.0-120*		*09/15/2022 17:01*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000472	0.00101	1.01	09/17/2022 20:23	WG1927467
Toluene	U		0.00131	0.00505	1.01	09/17/2022 20:23	WG1927467
Ethylbenzene	U		0.000744	0.00253	1.01	09/17/2022 20:23	WG1927467
Xylenes, Total	U		0.000889	0.00656	1.01	09/17/2022 20:23	WG1927467
1,2,4-Trimethylbenzene	U		0.00160	0.00505	1.01	09/17/2022 20:23	WG1927467
1,3,5-Trimethylbenzene	U		0.00202	0.00505	1.01	09/17/2022 20:23	WG1927467
(S) Toluene-d8	*114*			*75.0-131*		*09/17/2022 20:23*	WG1927467
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*09/17/2022 20:23*	WG1927467
(S) 1,2-Dichloroethane-d4	*85.4*			*70.0-130*		*09/17/2022 20:23*	WG1927467

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.48	J	1.61	4.00	1	09/16/2022 15:52	WG1926743
C28-C36 Motor Oil Range	2.30	J	0.274	4.00	1	09/16/2022 15:52	WG1926743
(S) o-Terphenyl	*61.9*			*18.0-148*		*09/16/2022 15:52*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U	J3	0.00230	0.00600	1	09/17/2022 11:37	WG1926770
Acenaphthene	U	J3	0.00209	0.00600	1	09/17/2022 11:37	WG1926770
Benzo(a)anthracene	U	J3	0.00173	0.00600	1	09/17/2022 11:37	WG1926770
Benzo(a)pyrene	U	J3	0.00179	0.00600	1	09/17/2022 11:37	WG1926770
Benzo(b)fluoranthene	U	J3	0.00153	0.00600	1	09/17/2022 11:37	WG1926770
Benzo(k)fluoranthene	U	J3	0.00215	0.00600	1	09/17/2022 11:37	WG1926770
Chrysene	U	J3	0.00232	0.00600	1	09/17/2022 11:37	WG1926770
Dibenz(a,h)anthracene	U	J3	0.00172	0.00600	1	09/17/2022 11:37	WG1926770
Fluoranthene	U	J3	0.00227	0.00600	1	09/17/2022 11:37	WG1926770
Fluorene	U	J3	0.00205	0.00600	1	09/17/2022 11:37	WG1926770
Indeno(1,2,3-cd)pyrene	U	J3	0.00181	0.00600	1	09/17/2022 11:37	WG1926770
Naphthalene	U	J3	0.00408	0.0200	1	09/17/2022 11:37	WG1926770
Pyrene	U	J3	0.00200	0.00600	1	09/17/2022 11:37	WG1926770
1-Methylnaphthalene	U	J3	0.00449	0.0200	1	09/17/2022 11:37	WG1926770
2-Methylnaphthalene	U	J3	0.00427	0.0200	1	09/17/2022 11:37	WG1926770
(S) p-Terphenyl-d14	*67.2*			*23.0-120*		*09/17/2022 11:37*	WG1926770
(S) Nitrobenzene-d5	*78.9*			*14.0-149*		*09/17/2022 11:37*	WG1926770
(S) 2-Fluorobiphenyl	*56.1*			*34.0-125*		*09/17/2022 11:37*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	3.16		1	09/20/2022 23:34	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.425	J	0.255	1.00	1	09/23/2022 13:56	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.43	T8	1	09/20/2022 16:00	WG1928926

Sample Narrative:

L1534450-08 WG1928926: 8.43 at 23.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	374		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-08 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	246		0.0852	0.500	1	09/20/2022 17:41	WG1924910
Cadmium	0.162	J	0.0471	0.500	1	09/20/2022 17:41	WG1924910
Copper	26.7		0.400	2.00	1	09/20/2022 17:41	WG1924910
Lead	10.9		0.208	0.500	1	09/20/2022 17:41	WG1924910
Nickel	14.5		0.132	2.00	1	09/20/2022 17:41	WG1924910
Selenium	U		0.764	2.00	1	09/20/2022 17:41	WG1924910
Silver	U		0.127	1.00	1	09/20/2022 17:41	WG1924910
Zinc	59.2		0.832	5.00	1	09/20/2022 17:41	WG1924910

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.204		0.0167	0.200	1	09/22/2022 00:35	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.16		0.100	1.00	5	09/20/2022 14:32	WG1924911

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	09/15/2022 17:22	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*92.9*			*77.0-120*		*09/15/2022 17:22*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	09/17/2022 20:42	WG1927467
Toluene	U		0.00130	0.00500	1	09/17/2022 20:42	WG1927467
Ethylbenzene	U		0.000737	0.00250	1	09/17/2022 20:42	WG1927467
Xylenes, Total	U		0.000880	0.00650	1	09/17/2022 20:42	WG1927467
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	09/17/2022 20:42	WG1927467
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	09/17/2022 20:42	WG1927467
(S) Toluene-d8	*118*			*75.0-131*		*09/17/2022 20:42*	WG1927467
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*		*09/17/2022 20:42*	WG1927467
(S) 1,2-Dichloroethane-d4	*76.5*			*70.0-130*		*09/17/2022 20:42*	WG1927467

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	18.1		1.61	4.00	1	09/16/2022 16:20	WG1926743
C28-C36 Motor Oil Range	18.1		0.274	4.00	1	09/16/2022 16:20	WG1926743
(S) o-Terphenyl	*70.0*			*18.0-148*		*09/16/2022 16:20*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 15:47	WG1926770
Acenaphthene	U		0.00209	0.00600	1	09/17/2022 15:47	WG1926770
Benzo(a)anthracene	0.00321	J	0.00173	0.00600	1	09/17/2022 15:47	WG1926770
Benzo(a)pyrene	0.00276	J	0.00179	0.00600	1	09/17/2022 15:47	WG1926770
Benzo(b)fluoranthene	0.00376	J	0.00153	0.00600	1	09/17/2022 15:47	WG1926770
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/17/2022 15:47	WG1926770
Chrysene	0.00315	J	0.00232	0.00600	1	09/17/2022 15:47	WG1926770
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/17/2022 15:47	WG1926770
Fluoranthene	0.00757		0.00227	0.00600	1	09/17/2022 15:47	WG1926770
Fluorene	U		0.00205	0.00600	1	09/17/2022 15:47	WG1926770
Indeno(1,2,3-cd)pyrene	0.00200	J	0.00181	0.00600	1	09/17/2022 15:47	WG1926770
Naphthalene	U		0.00408	0.0200	1	09/17/2022 15:47	WG1926770
Pyrene	0.00615		0.00200	0.00600	1	09/17/2022 15:47	WG1926770
1-Methylnaphthalene	0.00451	J	0.00449	0.0200	1	09/17/2022 15:47	WG1926770
2-Methylnaphthalene	0.00545	J	0.00427	0.0200	1	09/17/2022 15:47	WG1926770
(S) p-Terphenyl-d14	*74.2*			*23.0-120*		*09/17/2022 15:47*	WG1926770
(S) Nitrobenzene-d5	*81.8*			*14.0-149*		*09/17/2022 15:47*	WG1926770
(S) 2-Fluorobiphenyl	*79.0*			*34.0-125*		*09/17/2022 15:47*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.60		1	09/20/2022 23:37	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.406	J	0.255	1.00	1	09/23/2022 14:01	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.28	T8	1	09/20/2022 16:00	WG1928926

Sample Narrative:

L1534450-09 WG1928926: 8.28 at 23.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	248		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-09 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	244		0.0852	0.500	1	09/20/2022 17:44	WG1924910
Cadmium	0.122	J	0.0471	0.500	1	09/20/2022 17:44	WG1924910
Copper	26.4		0.400	2.00	1	09/20/2022 17:44	WG1924910
Lead	10.5		0.208	0.500	1	09/20/2022 17:44	WG1924910
Nickel	13.4		0.132	2.00	1	09/20/2022 17:44	WG1924910
Selenium	U		0.764	2.00	1	09/20/2022 17:44	WG1924910
Silver	U		0.127	1.00	1	09/20/2022 17:44	WG1924910
Zinc	59.8		0.832	5.00	1	09/20/2022 17:44	WG1924910

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.137	J	0.0167	0.200	1	09/21/2022 23:27	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.21		0.100	1.00	5	09/20/2022 14:36	WG1924911

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	U		0.0217	0.100	1	09/15/2022 17:42	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*93.7*			*77.0-120*		*09/15/2022 17:42*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	09/17/2022 08:26	WG1927478
Toluene	U		0.00130	0.00500	1	09/17/2022 08:26	WG1927478
Ethylbenzene	U		0.000737	0.00250	1	09/17/2022 08:26	WG1927478
Xylenes, Total	U		0.000880	0.00650	1	09/17/2022 08:26	WG1927478
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	09/17/2022 08:26	WG1927478
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	09/17/2022 08:26	WG1927478
(S) Toluene-d8	*99.8*			*75.0-131*		*09/17/2022 08:26*	WG1927478
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*		*09/17/2022 08:26*	WG1927478
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*09/17/2022 08:26*	WG1927478

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.21		1.61	4.00	1	09/16/2022 16:06	WG1926743
C28-C36 Motor Oil Range	5.55		0.274	4.00	1	09/16/2022 16:06	WG1926743
(S) o-Terphenyl	*68.3*			*18.0-148*		*09/16/2022 16:06*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 16:05	WG1926770
Acenaphthene	U		0.00209	0.00600	1	09/17/2022 16:05	WG1926770
Benzo(a)anthracene	U		0.00173	0.00600	1	09/17/2022 16:05	WG1926770
Benzo(a)pyrene	U		0.00179	0.00600	1	09/17/2022 16:05	WG1926770
Benzo(b)fluoranthene	U		0.00153	0.00600	1	09/17/2022 16:05	WG1926770
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/17/2022 16:05	WG1926770
Chrysene	U		0.00232	0.00600	1	09/17/2022 16:05	WG1926770
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/17/2022 16:05	WG1926770
Fluoranthene	U		0.00227	0.00600	1	09/17/2022 16:05	WG1926770
Fluorene	U		0.00205	0.00600	1	09/17/2022 16:05	WG1926770
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	09/17/2022 16:05	WG1926770
Naphthalene	U		0.00408	0.0200	1	09/17/2022 16:05	WG1926770
Pyrene	U		0.00200	0.00600	1	09/17/2022 16:05	WG1926770
1-Methylnaphthalene	U		0.00449	0.0200	1	09/17/2022 16:05	WG1926770
2-Methylnaphthalene	U		0.00427	0.0200	1	09/17/2022 16:05	WG1926770
(S) p-Terphenyl-d14	*66.7*			*23.0-120*		*09/17/2022 16:05*	WG1926770
(S) Nitrobenzene-d5	*67.2*			*14.0-149*		*09/17/2022 16:05*	WG1926770
(S) 2-Fluorobiphenyl	*62.9*			*34.0-125*		*09/17/2022 16:05*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.68		1	09/20/2022 23:45	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	09/23/2022 14:07	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.76	T8	1	09/20/2022 17:00	WG1929264

Sample Narrative:

L1534450-10 WG1929264: 7.76 at 23.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1310		10.0	1	09/22/2022 12:10	WG1927476

Sample Narrative:

L1534450-10 WG1927476: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	324		0.0852	0.500	1	09/20/2022 17:46	WG1924910
Cadmium	0.487	J	0.0471	0.500	1	09/20/2022 17:46	WG1924910
Copper	33.1		0.400	2.00	1	09/20/2022 17:46	WG1924910
Lead	13.5		0.208	0.500	1	09/20/2022 17:46	WG1924910
Nickel	16.9		0.132	2.00	1	09/20/2022 17:46	WG1924910
Selenium	U		0.764	2.00	1	09/20/2022 17:46	WG1924910
Silver	U		0.127	1.00	1	09/20/2022 17:46	WG1924910
Zinc	82.0		0.832	5.00	1	09/20/2022 17:46	WG1924910

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	1.17		0.0167	0.200	1	09/21/2022 23:30	WG1928847

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.47		0.100	1.00	5	09/20/2022 14:39	WG1924911

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	2.12		0.0217	0.100	1	09/15/2022 18:31	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*90.7*			*77.0-120*		*09/15/2022 18:31*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00159		0.000472	0.00101	1.01	09/17/2022 09:40	WG1927478
Toluene	0.00364	J	0.00131	0.00505	1.01	09/17/2022 09:40	WG1927478
Ethylbenzene	0.00162	J	0.000744	0.00253	1.01	09/17/2022 09:40	WG1927478
Xylenes, Total	0.00950		0.000889	0.00656	1.01	09/17/2022 09:40	WG1927478
1,2,4-Trimethylbenzene	0.00457	J	0.00160	0.00505	1.01	09/17/2022 09:40	WG1927478
1,3,5-Trimethylbenzene	0.00306	J	0.00202	0.00505	1.01	09/17/2022 09:40	WG1927478
(S) Toluene-d8	*99.4*			*75.0-131*		*09/17/2022 09:40*	WG1927478
(S) 4-Bromofluorobenzene	*93.7*			*67.0-138*		*09/17/2022 09:40*	WG1927478
(S) 1,2-Dichloroethane-d4	*89.4*			*70.0-130*		*09/17/2022 09:40*	WG1927478

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	440		16.1	40.0	10	09/17/2022 11:16	WG1926743
C28-C36 Motor Oil Range	196		2.74	40.0	10	09/17/2022 11:16	WG1926743
(S) o-Terphenyl	*99.2*			*18.0-148*		*09/17/2022 11:16*	WG1926743

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 17:53	WG1926770
Acenaphthene	0.00333	J	0.00209	0.00600	1	09/17/2022 17:53	WG1926770
Benzo(a)anthracene	0.00333	J	0.00173	0.00600	1	09/17/2022 17:53	WG1926770
Benzo(a)pyrene	0.00191	J	0.00179	0.00600	1	09/17/2022 17:53	WG1926770
Benzo(b)fluoranthene	0.00479	J	0.00153	0.00600	1	09/17/2022 17:53	WG1926770
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/17/2022 17:53	WG1926770
Chrysene	0.00665		0.00232	0.00600	1	09/17/2022 17:53	WG1926770
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/17/2022 17:53	WG1926770
Fluoranthene	0.00564	J	0.00227	0.00600	1	09/17/2022 17:53	WG1926770
Fluorene	0.00899		0.00205	0.00600	1	09/17/2022 17:53	WG1926770
Indeno(1,2,3-cd)pyrene	0.00198	J	0.00181	0.00600	1	09/17/2022 17:53	WG1926770
Naphthalene	0.0241		0.00408	0.0200	1	09/17/2022 17:53	WG1926770
Pyrene	0.00718		0.00200	0.00600	1	09/17/2022 17:53	WG1926770
1-Methylnaphthalene	0.0344		0.00449	0.0200	1	09/17/2022 17:53	WG1926770
2-Methylnaphthalene	0.0656		0.00427	0.0200	1	09/17/2022 17:53	WG1926770
(S) p-Terphenyl-d14	*67.3*			*23.0-120*		*09/17/2022 17:53*	WG1926770
(S) Nitrobenzene-d5	*41.0*			*14.0-149*		*09/17/2022 17:53*	WG1926770
(S) 2-Fluorobiphenyl	*71.8*			*34.0-125*		*09/17/2022 17:53*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	8.09		1	09/20/2022 23:48	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	09/23/2022 14:12	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	9.12	T8	1	09/20/2022 17:00	WG1929264

Sample Narrative:

L1534450-11 WG1929264: 9.12 at 23.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	337		10.0	1	09/23/2022 11:10	WG1927576

Sample Narrative:

L1534450-11 WG1927576: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	243	J3 J5 O1	0.0852	0.500	1	09/15/2022 17:37	WG1926442
Cadmium	0.489	J	0.0471	0.500	1	09/15/2022 17:37	WG1926442
Copper	53.6		0.400	2.00	1	09/15/2022 17:37	WG1926442
Lead	48.7	J6	0.208	0.500	1	09/15/2022 17:37	WG1926442
Nickel	46.2		0.132	2.00	1	09/15/2022 17:37	WG1926442
Selenium	U		0.764	2.00	1	09/15/2022 17:37	WG1926442
Silver	U		0.127	1.00	1	09/15/2022 17:37	WG1926442
Zinc	87.9	O1	0.832	5.00	1	09/15/2022 17:37	WG1926442

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.173	J	0.0167	0.200	1	09/15/2022 22:40	WG1925597

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	29.4	J6	0.100	1.00	5	09/15/2022 18:35	WG1926444

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.708		0.0217	0.100	1	09/15/2022 18:52	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*89.6*			*77.0-120*		*09/15/2022 18:52*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.00110		0.000467	0.00100	1	09/17/2022 09:59	WG1927478
Toluene	0.00523		0.00130	0.00500	1	09/17/2022 09:59	WG1927478
Ethylbenzene	0.00738		0.000737	0.00250	1	09/17/2022 09:59	WG1927478
Xylenes, Total	0.0771		0.000880	0.00650	1	09/17/2022 09:59	WG1927478
1,2,4-Trimethylbenzene	0.141		0.00158	0.00500	1	09/17/2022 09:59	WG1927478
1,3,5-Trimethylbenzene	0.0394		0.00200	0.00500	1	09/17/2022 09:59	WG1927478
(S) Toluene-d8	*103*			*75.0-131*		*09/17/2022 09:59*	WG1927478
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*09/17/2022 09:59*	WG1927478
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*09/17/2022 09:59*	WG1927478

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	44.2		1.61	4.00	1	09/16/2022 13:17	WG1926744
C28-C36 Motor Oil Range	33.3		0.274	4.00	1	09/16/2022 13:17	WG1926744
(S) o-Terphenyl	*45.6*			*18.0-148*		*09/16/2022 13:17*	WG1926744

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 17:35	WG1926770
Acenaphthene	0.0198		0.00209	0.00600	1	09/17/2022 17:35	WG1926770
Benzo(a)anthracene	0.0126		0.00173	0.00600	1	09/17/2022 17:35	WG1926770
Benzo(a)pyrene	0.00778		0.00179	0.00600	1	09/17/2022 17:35	WG1926770
Benzo(b)fluoranthene	0.00954		0.00153	0.00600	1	09/17/2022 17:35	WG1926770
Benzo(k)fluoranthene	0.00224	J	0.00215	0.00600	1	09/17/2022 17:35	WG1926770
Chrysene	0.0161		0.00232	0.00600	1	09/17/2022 17:35	WG1926770
Dibenz(a,h)anthracene	0.00246	J	0.00172	0.00600	1	09/17/2022 17:35	WG1926770
Fluoranthene	0.0123		0.00227	0.00600	1	09/17/2022 17:35	WG1926770
Fluorene	0.0340		0.00205	0.00600	1	09/17/2022 17:35	WG1926770
Indeno(1,2,3-cd)pyrene	0.00336	J	0.00181	0.00600	1	09/17/2022 17:35	WG1926770
Naphthalene	0.214		0.00408	0.0200	1	09/17/2022 17:35	WG1926770
Pyrene	0.0195		0.00200	0.00600	1	09/17/2022 17:35	WG1926770
1-Methylnaphthalene	0.493		0.00449	0.0200	1	09/17/2022 17:35	WG1926770
2-Methylnaphthalene	0.909		0.00427	0.0200	1	09/17/2022 17:35	WG1926770
(S) p-Terphenyl-d14	*82.1*			*23.0-120*		*09/17/2022 17:35*	WG1926770
(S) Nitrobenzene-d5	*91.8*			*14.0-149*		*09/17/2022 17:35*	WG1926770
(S) 2-Fluorobiphenyl	*82.6*			*34.0-125*		*09/17/2022 17:35*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.61		1	09/20/2022 23:51	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.562	J	0.255	1.00	1	09/23/2022 14:18	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.44	T8	1	09/20/2022 17:00	WG1929264

Sample Narrative:

L1534450-12 WG1929264: 8.44 at 23.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	211		10.0	1	09/23/2022 11:10	WG1927576

Sample Narrative:

L1534450-12 WG1927576: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	286		0.0852	0.500	1	09/15/2022 17:53	WG1926442
Cadmium	0.299	J	0.0471	0.500	1	09/15/2022 17:53	WG1926442
Copper	26.7		0.400	2.00	1	09/15/2022 17:53	WG1926442
Lead	13.1		0.208	0.500	1	09/15/2022 17:53	WG1926442
Nickel	14.7		0.132	2.00	1	09/15/2022 17:53	WG1926442
Selenium	U		0.764	2.00	1	09/15/2022 17:53	WG1926442
Silver	U		0.127	1.00	1	09/15/2022 17:53	WG1926442
Zinc	56.8		0.832	5.00	1	09/15/2022 17:53	WG1926442

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.175	J	0.0167	0.200	1	09/15/2022 22:42	WG1925597

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.65		0.100	1.00	5	09/15/2022 18:55	WG1926444

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.137		0.0217	0.100	1	09/15/2022 19:12	WG1926632
(S) a,a,a-Trifluorotoluene(FID)	*92.9*			*77.0-120*		*09/15/2022 19:12*	WG1926632

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	09/17/2022 10:19	WG1927478
Toluene	U		0.00130	0.00500	1	09/17/2022 10:19	WG1927478
Ethylbenzene	U		0.000737	0.00250	1	09/17/2022 10:19	WG1927478
Xylenes, Total	U		0.000880	0.00650	1	09/17/2022 10:19	WG1927478
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	09/17/2022 10:19	WG1927478
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	09/17/2022 10:19	WG1927478
(S) Toluene-d8	*99.7*			*75.0-131*		*09/17/2022 10:19*	WG1927478
(S) 4-Bromofluorobenzene	*95.5*			*67.0-138*		*09/17/2022 10:19*	WG1927478
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*09/17/2022 10:19*	WG1927478

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.38	J	1.61	4.00	1	09/16/2022 17:31	WG1926744
C28-C36 Motor Oil Range	3.87	J	0.274	4.00	1	09/16/2022 17:31	WG1926744
(S) o-Terphenyl	*61.6*			*18.0-148*		*09/16/2022 17:31*	WG1926744

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 16:22	WG1926770
Acenaphthene	U		0.00209	0.00600	1	09/17/2022 16:22	WG1926770
Benzo(a)anthracene	U		0.00173	0.00600	1	09/17/2022 16:22	WG1926770
Benzo(a)pyrene	U		0.00179	0.00600	1	09/17/2022 16:22	WG1926770
Benzo(b)fluoranthene	U		0.00153	0.00600	1	09/17/2022 16:22	WG1926770
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/17/2022 16:22	WG1926770
Chrysene	U		0.00232	0.00600	1	09/17/2022 16:22	WG1926770
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/17/2022 16:22	WG1926770
Fluoranthene	U		0.00227	0.00600	1	09/17/2022 16:22	WG1926770
Fluorene	U		0.00205	0.00600	1	09/17/2022 16:22	WG1926770
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	09/17/2022 16:22	WG1926770
Naphthalene	0.00420	J	0.00408	0.0200	1	09/17/2022 16:22	WG1926770
Pyrene	U		0.00200	0.00600	1	09/17/2022 16:22	WG1926770
1-Methylnaphthalene	U		0.00449	0.0200	1	09/17/2022 16:22	WG1926770
2-Methylnaphthalene	0.00654	J	0.00427	0.0200	1	09/17/2022 16:22	WG1926770
(S) p-Terphenyl-d14	*80.9*			*23.0-120*		*09/17/2022 16:22*	WG1926770
(S) Nitrobenzene-d5	*74.0*			*14.0-149*		*09/17/2022 16:22*	WG1926770
(S) 2-Fluorobiphenyl	*69.4*			*34.0-125*		*09/17/2022 16:22*	WG1926770

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	1.31		1	09/20/2022 23:53	WG1926589

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.429	J	0.255	1.00	1	09/23/2022 14:25	WG1929479

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.21	T8	1	09/20/2022 17:00	WG1929264

Sample Narrative:

L1534450-13 WG1929264: 8.21 at 23.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	300		10.0	1	09/23/2022 11:10	WG1927576

Sample Narrative:

L1534450-13 WG1927576: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	251		0.0852	0.500	1	09/15/2022 17:56	WG1926442
Cadmium	0.313	J	0.0471	0.500	1	09/15/2022 17:56	WG1926442
Copper	27.4		0.400	2.00	1	09/15/2022 17:56	WG1926442
Lead	13.4		0.208	0.500	1	09/15/2022 17:56	WG1926442
Nickel	15.6		0.132	2.00	1	09/15/2022 17:56	WG1926442
Selenium	U		0.764	2.00	1	09/15/2022 17:56	WG1926442
Silver	U		0.127	1.00	1	09/15/2022 17:56	WG1926442
Zinc	60.9		0.832	5.00	1	09/15/2022 17:56	WG1926442

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.153	J	0.0167	0.200	1	09/15/2022 22:45	WG1925597

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.46		0.100	1.00	5	09/15/2022 18:58	WG1926444

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0244	B J	0.0219	0.101	1.01	09/15/2022 22:11	WG1927118
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*		*09/15/2022 22:11*	WG1927118

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000472	0.00101	1.01	09/17/2022 10:38	WG1927478
Toluene	U		0.00131	0.00505	1.01	09/17/2022 10:38	WG1927478
Ethylbenzene	U		0.000744	0.00253	1.01	09/17/2022 10:38	WG1927478
Xylenes, Total	U		0.000889	0.00656	1.01	09/17/2022 10:38	WG1927478
1,2,4-Trimethylbenzene	U		0.00160	0.00505	1.01	09/17/2022 10:38	WG1927478
1,3,5-Trimethylbenzene	U		0.00202	0.00505	1.01	09/17/2022 10:38	WG1927478
(S) Toluene-d8	*104*			*75.0-131*		*09/17/2022 10:38*	WG1927478
(S) 4-Bromofluorobenzene	*97.8*			*67.0-138*		*09/17/2022 10:38*	WG1927478
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*09/17/2022 10:38*	WG1927478

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.52	J	1.61	4.00	1	09/16/2022 13:04	WG1926744
C28-C36 Motor Oil Range	2.60	J	0.274	4.00	1	09/16/2022 13:04	WG1926744
(S) o-Terphenyl	*67.3*			*18.0-148*		*09/16/2022 13:04*	WG1926744

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

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	U		0.00230	0.00600	1	09/17/2022 16:40	WG1926770
Acenaphthene	U		0.00209	0.00600	1	09/17/2022 16:40	WG1926770
Benzo(a)anthracene	0.00243	J	0.00173	0.00600	1	09/17/2022 16:40	WG1926770
Benzo(a)pyrene	0.00231	J	0.00179	0.00600	1	09/17/2022 16:40	WG1926770
Benzo(b)fluoranthene	0.00363	J	0.00153	0.00600	1	09/17/2022 16:40	WG1926770
Benzo(k)fluoranthene	U		0.00215	0.00600	1	09/17/2022 16:40	WG1926770
Chrysene	0.00283	J	0.00232	0.00600	1	09/17/2022 16:40	WG1926770
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	09/17/2022 16:40	WG1926770
Fluoranthene	0.00434	J	0.00227	0.00600	1	09/17/2022 16:40	WG1926770
Fluorene	U		0.00205	0.00600	1	09/17/2022 16:40	WG1926770
Indeno(1,2,3-cd)pyrene	0.00204	J	0.00181	0.00600	1	09/17/2022 16:40	WG1926770
Naphthalene	U		0.00408	0.0200	1	09/17/2022 16:40	WG1926770
Pyrene	0.00441	J	0.00200	0.00600	1	09/17/2022 16:40	WG1926770
1-Methylnaphthalene	U		0.00449	0.0200	1	09/17/2022 16:40	WG1926770
2-Methylnaphthalene	U		0.00427	0.0200	1	09/17/2022 16:40	WG1926770
(S) p-Terphenyl-d14	*78.4*			*23.0-120*		*09/17/2022 16:40*	WG1926770
(S) Nitrobenzene-d5	*78.7*			*14.0-149*		*09/17/2022 16:40*	WG1926770
(S) 2-Fluorobiphenyl	*77.4*			*34.0-125*		*09/17/2022 16:40*	WG1926770

Method Blank (MB)

(MB) R3841276-1 09/23/22 12:40

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1534450-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1534450-03 09/23/22 13:15 • (DUP) R3841276-3 09/23/22 13:20

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.530	0.473	1	11.2	J	20

L1536017-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1536017-02 09/23/22 14:36 • (DUP) R3841276-4 09/23/22 14:51

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3841276-2 09/23/22 12:45

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.3	103	80.0-120	

L1536017-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1536017-03 09/23/22 14:56 • (MS) R3841276-7 09/23/22 15:02 • (MSD) R3841276-8 09/23/22 15:07

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 %
Hexavalent Chromium	20.0	0.312	16.1	14.2	78.8	69.4	1	75.0-125		J6	12.5	20

L1536017-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1536017-03 09/23/22 14:56 • (MS) R3841276-10 09/23/22 15:17

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	646	0.312	533	82.6	50	75.0-125	

L1533904-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1533904-04 09/20/22 16:00 • (DUP) R3839342-2 09/20/22 16:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.80	8.79	1	0.114		1

Sample Narrative:

OS: 8.8 at 23.1C

DUP: 8.79 at 22.9C

L1534450-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1534450-08 09/20/22 16:00 • (DUP) R3839342-3 09/20/22 16:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.43	8.46	1	0.355		1

Sample Narrative:

OS: 8.43 at 23.2C

DUP: 8.46 at 23C

Laboratory Control Sample (LCS)

(LCS) R3839342-1 09/20/22 16:00

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

Sample Narrative:

LCS: 9.91 at 23.6C

L1534044-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1534044-02 09/21/22 12:00 • (DUP) R3839634-2 09/21/22 12:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.75	7.75	1	0.000		1

Sample Narrative:

OS: 7.75 at 21.6C

DUP: 7.75 at 21.8C

L1534307-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1534307-01 09/21/22 12:00 • (DUP) R3839634-3 09/21/22 12:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.43	8.42	1	0.119		1

Sample Narrative:

OS: 8.43 at 22.1C

DUP: 8.42 at 22.2C

Laboratory Control Sample (LCS)

(LCS) R3839634-1 09/21/22 12:00

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

Sample Narrative:

LCS: 9.91 at 21C

L1534552-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1534552-01 09/20/22 17:00 • (DUP) R3839370-2 09/20/22 17:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	pH	su		%		%
pH	8.12	8.11	1	0.123		1

Sample Narrative:

OS: 8.12 at 23.2C

DUP: 8.11 at 23.2C

L1534970-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1534970-05 09/20/22 17:00 • (DUP) R3839370-3 09/20/22 17:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	8.80	8.80	1	0.000		1

Sample Narrative:

OS: 8.8 at 22.9C

DUP: 8.8 at 23C

Laboratory Control Sample (LCS)

(LCS) R3839370-1 09/20/22 17:00

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

Sample Narrative:

LCS: 9.9 at 22.7C

Method Blank (MB)

(MB) R3840169-1 09/22/22 12:10

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:
BLANK: at 25C

L1532261-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1532261-03 09/22/22 12:10 • (DUP) R3840169-3 09/22/22 12:10

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	69.2	68.8	1	0.580		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1534450-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1534450-04 09/22/22 12:10 • (DUP) R3840169-4 09/22/22 12:10

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	887	889	1	0.225		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3840169-2 09/22/22 12:10

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	1120	1130	101	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3840590-1 09/23/22 11:10

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:
BLANK: at 25C

L1534450-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1534450-12 09/23/22 11:10 • (DUP) R3840590-3 09/23/22 11:10

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	211	210	1	0.712		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1534581-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1534581-01 09/23/22 11:10 • (DUP) R3840590-4 09/23/22 11:10

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	191	193	1	0.729		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3840590-2 09/23/22 11:10

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	1120	1120	99.7	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3839400-1 09/20/22 16:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3839400-2 09/20/22 16:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	101	101	80.0-120	
Cadmium	100	94.5	94.5	80.0-120	
Copper	100	98.8	98.8	80.0-120	
Lead	100	97.8	97.8	80.0-120	
Nickel	100	95.7	95.7	80.0-120	
Selenium	100	96.4	96.4	80.0-120	
Silver	20.0	19.6	97.9	80.0-120	
Zinc	100	95.6	95.6	80.0-120	

L1534062-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534062-01 09/20/22 16:34 • (MS) R3839400-5 09/20/22 16:41 • (MSD) R3839400-6 09/20/22 16:44

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 %
Barium	100	19.9	119	114	98.9	94.6	1	75.0-125			3.68	20
Cadmium	100	0.147	93.5	87.4	93.3	87.3	1	75.0-125			6.71	20
Copper	100	13.5	117	112	103	98.0	1	75.0-125			4.74	20
Lead	100	0.451	98.4	92.7	97.9	92.2	1	75.0-125			5.97	20
Nickel	100	4.49	101	95.8	97.0	91.3	1	75.0-125			5.77	20
Selenium	100	1.01	96.4	90.8	95.4	89.8	1	75.0-125			6.04	20
Silver	20.0	U	19.7	18.4	98.6	92.2	1	75.0-125			6.74	20
Zinc	100	26.1	122	118	95.6	91.8	1	75.0-125			3.16	20

Method Blank (MB)

(MB) R3836667-1 09/13/22 12:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3836667-2 09/13/22 12:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	101	101	80.0-120	
Cadmium	100	97.1	97.1	80.0-120	
Copper	100	100	100	80.0-120	
Lead	100	92.1	92.1	80.0-120	
Nickel	100	95.0	95.0	80.0-120	
Selenium	100	96.7	96.7	80.0-120	
Silver	20.0	18.7	93.7	80.0-120	
Zinc	100	93.7	93.7	80.0-120	

L1533460-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1533460-01 09/13/22 12:51 • (MS) R3836667-5 09/13/22 12:59 • (MSD) R3836667-6 09/13/22 13:02

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 %
Barium	100	1630	1610	1310	0.000	0.000	1	75.0-125	V	J3 V	20.8	20
Cadmium	100	0.480	103	98.5	103	98.0	1	75.0-125			4.80	20
Copper	100	13.3	121	116	108	103	1	75.0-125			4.15	20
Lead	100	10.6	108	104	97.1	93.5	1	75.0-125			3.37	20
Nickel	100	16.4	116	113	99.3	96.3	1	75.0-125			2.65	20
Selenium	100	1.23	103	97.1	102	95.9	1	75.0-125			6.11	20
Silver	20.0	U	20.0	19.1	99.8	95.4	1	75.0-125			4.50	20
Zinc	100	51.7	144	144	92.4	92.6	1	75.0-125			0.131	20

Method Blank (MB)

(MB) R3837808-1 09/15/22 17:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3837808-2 09/15/22 17:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	101	101	80.0-120	
Cadmium	100	97.2	97.2	80.0-120	
Copper	100	96.7	96.7	80.0-120	
Lead	100	97.3	97.3	80.0-120	
Nickel	100	96.7	96.7	80.0-120	
Selenium	100	98.8	98.8	80.0-120	
Silver	20.0	19.1	95.6	80.0-120	
Zinc	100	94.5	94.5	80.0-120	

L1534450-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534450-11 09/15/22 17:37 • (MS) R3837808-5 09/15/22 17:45 • (MSD) R3837808-6 09/15/22 17:48

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 %
Barium	100	243	408	329	165	85.8	1	75.0-125	J5	J3	21.5	20
Cadmium	100	0.489	84.8	87.6	84.3	87.1	1	75.0-125			3.24	20
Copper	100	53.6	148	154	94.3	100	1	75.0-125			3.80	20
Lead	100	48.7	128	120	79.6	71.0	1	75.0-125		J6	6.94	20
Nickel	100	46.2	137	133	90.6	86.9	1	75.0-125			2.75	20
Selenium	100	U	82.7	86.7	82.7	86.7	1	75.0-125			4.76	20
Silver	20.0	U	16.6	17.1	83.1	85.5	1	75.0-125			2.86	20
Zinc	100	87.9	173	169	85.2	81.5	1	75.0-125			2.14	20

Method Blank (MB)

(MB) R3837837-1 09/15/22 22:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

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

(LCS) R3837837-2 09/15/22 22:34 • (LCSD) R3837837-3 09/15/22 22:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.01	1.00	101	100	80.0-120			1.22	20

Method Blank (MB)

(MB) R3839973-1 09/21/22 23:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

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

(LCS) R3839973-2 09/21/22 23:41 • (LCSD) R3839973-3 09/21/22 23:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	1.03	1.02	103	102	80.0-120			1.60	20

Method Blank (MB)

(MB) R3839239-1 09/20/22 13:33

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) R3839239-2 09/20/22 13:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	87.8	87.8	80.0-120	

L1534062-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534062-01 09/20/22 13:40 • (MS) R3839239-5 09/20/22 13:49 • (MSD) R3839239-6 09/20/22 13:53

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	1.99	90.3	77.9	88.3	75.9	5	75.0-125			14.7	20

Method Blank (MB)

(MB) R3836471-1 09/13/22 10:36

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) R3836471-2 09/13/22 10:39

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	86.3	86.3	80.0-120	

L1533460-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1533460-01 09/13/22 10:43 • (MS) R3836471-5 09/13/22 10:52 • (MSD) R3836471-6 09/13/22 10:56

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	3.91	90.6	91.2	86.7	87.3	5	75.0-125			0.646	20

QUALITY CONTROL SUMMARY

L1534450-07,11,12,13

Method Blank (MB)

(MB) R3837803-1 09/15/22 18:29

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) R3837803-2 09/15/22 18:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	94.5	94.5	80.0-120	

L1534450-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534450-11 09/15/22 18:35 • (MS) R3837803-5 09/15/22 18:45 • (MSD) R3837803-6 09/15/22 18:48

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	29.4	107	89.4	77.4	60.0	5	75.0-125		J6	17.8	20

Method Blank (MB)

(MB) R3837969-2 09/15/22 10:23

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)	*94.1*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3837969-1 09/15/22 09:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.07	92.2	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*100*	*77.0-120*	

L1534450-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534450-01 09/15/22 13:44 • (MS) R3837969-3 09/15/22 19:32 • (MSD) R3837969-4 09/15/22 19:53

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	5.45	0.109	3.01	2.49	53.2	43.3	1	10.0-151			18.9	28
(S) a,a,a-Trifluorotoluene(FID)					*98.6*	*85.6*		*77.0-120*				

Method Blank (MB)

(MB) R3838692-2 09/15/22 20:11

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0218	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*106*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3838692-1 09/15/22 19:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.20	113	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*115*	*77.0-120*	

L1534556-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534556-01 09/15/22 22:33 • (MS) R3838692-3 09/16/22 04:20 • (MSD) R3838692-4 09/16/22 04:43

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	5.50	0.0331	4.84	4.22	87.4	76.1	1	10.0-151			13.7	28
(S) a,a,a-Trifluorotoluene(FID)					*113*	*111*		*77.0-120*				

Method Blank (MB)

(MB) R3839059-2 09/17/22 14:30

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	U		0.000880	0.00650
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
(S) Toluene-d8	*119*			*75.0-131*
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*76.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3839059-1 09/17/22 13:34

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.125	0.109	87.2	70.0-123	
Toluene	0.125	0.129	103	75.0-121	
Ethylbenzene	0.125	0.134	107	74.0-126	
Xylenes, Total	0.375	0.384	102	72.0-127	
1,2,4-Trimethylbenzene	0.125	0.104	83.2	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.111	88.8	73.0-127	
(S) Toluene-d8			*116*	*75.0-131*	
(S) 4-Bromofluorobenzene			*102*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*88.8*	*70.0-130*	

Method Blank (MB)

(MB) R3838428-3 09/17/22 08:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	U		0.000880	0.00650
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

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

(LCS) R3838428-1 09/17/22 06:48 • (LCSD) R3838428-2 09/17/22 07:07

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 %
Benzene	0.125	0.133	0.123	106	98.4	70.0-123			7.81	20
Toluene	0.125	0.115	0.108	92.0	86.4	75.0-121			6.28	20
Ethylbenzene	0.125	0.127	0.116	102	92.8	74.0-126			9.05	20
Xylenes, Total	0.375	0.361	0.346	96.3	92.3	72.0-127			4.24	20
1,2,4-Trimethylbenzene	0.125	0.122	0.115	97.6	92.0	70.0-126			5.91	20
1,3,5-Trimethylbenzene	0.125	0.124	0.112	99.2	89.6	73.0-127			10.2	20
(S) Toluene-d8				*97.9*	*98.7*	*75.0-131*				
(S) 4-Bromofluorobenzene				*101*	*102*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*112*	*116*	*70.0-130*				

Method Blank (MB)

(MB) R3838292-2 09/16/22 14:03

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	*78.4*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3838292-1 09/16/22 13:49

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	36.8	73.6	50.0-150	
(S) o-Terphenyl			*72.8*	*18.0-148*	

L1534342-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534342-03 09/16/22 14:44 • (MS) R3838292-3 09/16/22 14:58 • (MSD) R3838292-4 09/16/22 15:11

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	48.3	4.92	35.5	33.9	63.3	59.1	1	50.0-150			4.61	20
(S) o-Terphenyl					*67.5*	*69.1*		*18.0-148*				

Method Blank (MB)

(MB) R3838208-2 09/16/22 16:37

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	*78.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3838208-1 09/16/22 10:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	35.6	71.2	50.0-150	
(S) o-Terphenyl			*84.2*	*18.0-148*	

L1534558-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534558-03 09/16/22 11:12 • (MS) R3838208-3 09/16/22 11:24 • (MSD) R3838208-4 09/16/22 11:37

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	48.3	U	32.4	26.5	67.1	55.4	1	50.0-150			20.0	20
(S) o-Terphenyl					*72.5*	*65.2*		*18.0-148*				

Method Blank (MB)

(MB) R3838790-2 09/16/22 14:34

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00209	0.00600
Anthracene	U		0.00230	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
Naphthalene	U		0.00408	0.0200
Pyrene	U		0.00200	0.00600
(S) p-Terphenyl-d14	*69.8*			*23.0-120*
(S) Nitrobenzene-d5	*66.4*			*14.0-149*
(S) 2-Fluorobiphenyl	*70.1*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3838790-1 09/16/22 14:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0549	68.6	50.0-120	
Anthracene	0.0800	0.0516	64.5	50.0-126	
Benzo(a)anthracene	0.0800	0.0523	65.4	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0592	74.0	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0546	68.3	49.0-125	
Benzo(a)pyrene	0.0800	0.0517	64.6	42.0-120	
Chrysene	0.0800	0.0566	70.8	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0511	63.9	47.0-125	
Fluoranthene	0.0800	0.0567	70.9	49.0-129	
Fluorene	0.0800	0.0557	69.6	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0529	66.1	46.0-125	
1-Methylnaphthalene	0.0800	0.0520	65.0	51.0-121	
2-Methylnaphthalene	0.0800	0.0529	66.1	50.0-120	
Naphthalene	0.0800	0.0537	67.1	50.0-120	
Pyrene	0.0800	0.0544	68.0	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R3838790-1 09/16/22 14:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*74.3*	*23.0-120*	
(S) Nitrobenzene-d5			*75.3*	*14.0-149*	
(S) 2-Fluorobiphenyl			*75.4*	*34.0-125*	

L1534316-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534316-05 09/16/22 20:08 • (MS) R3838790-3 09/16/22 20:28 • (MSD) R3838790-4 09/16/22 20:48

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 %
Acenaphthene	0.0772	U	0.0529	0.0486	68.5	63.0	1	14.0-127			8.47	27
Anthracene	0.0772	U	0.0553	0.0519	71.6	67.2	1	10.0-145			6.34	30
Benzo(a)anthracene	0.0772	U	0.0578	0.0529	74.9	68.5	1	10.0-139			8.85	30
Benzo(b)fluoranthene	0.0772	0.00240	0.0489	0.0452	60.2	55.4	1	10.0-140			7.86	36
Benzo(k)fluoranthene	0.0772	U	0.0448	0.0423	58.0	54.8	1	10.0-137			5.74	31
Benzo(a)pyrene	0.0772	U	0.0542	0.0505	70.2	65.4	1	10.0-141			7.07	31
Chrysene	0.0772	U	0.0563	0.0512	72.9	66.3	1	10.0-145			9.49	30
Dibenz(a,h)anthracene	0.0772	U	0.0462	0.0427	59.8	55.3	1	10.0-132			7.87	31
Fluoranthene	0.0772	U	0.0590	0.0535	76.4	69.3	1	10.0-153			9.78	33
Fluorene	0.0772	U	0.0545	0.0497	70.6	64.4	1	11.0-130			9.21	29
Indeno(1,2,3-cd)pyrene	0.0772	U	0.0524	0.0498	67.9	64.5	1	10.0-137			5.09	32
1-Methylnaphthalene	0.0772	U	0.0526	0.0476	68.1	61.7	1	10.0-142			9.98	28
2-Methylnaphthalene	0.0772	U	0.0539	0.0492	69.8	63.7	1	10.0-137			9.12	28
Naphthalene	0.0772	U	0.0528	0.0538	68.4	69.7	1	10.0-135			1.88	27
Pyrene	0.0772	U	0.0531	0.0471	68.8	61.0	1	10.0-148			12.0	35
(S) p-Terphenyl-d14					*68.6*	*62.7*		*23.0-120*				
(S) Nitrobenzene-d5					*79.5*	*75.4*		*14.0-149*				
(S) 2-Fluorobiphenyl					*73.4*	*69.4*		*34.0-125*				

Method Blank (MB)

(MB) R3838528-2 09/17/22 11:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00209	0.00600
Anthracene	U		0.00230	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
Naphthalene	U		0.00408	0.0200
Pyrene	U		0.00200	0.00600
(S) p-Terphenyl-d14	*95.7*			*23.0-120*
(S) Nitrobenzene-d5	*77.5*			*14.0-149*
(S) 2-Fluorobiphenyl	*82.0*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3838528-1 09/17/22 11:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0648	81.0	50.0-120	
Anthracene	0.0800	0.0603	75.4	50.0-126	
Benzo(a)anthracene	0.0800	0.0593	74.1	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0604	75.5	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0604	75.5	49.0-125	
Benzo(a)pyrene	0.0800	0.0585	73.1	42.0-120	
Chrysene	0.0800	0.0639	79.9	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0604	75.5	47.0-125	
Fluoranthene	0.0800	0.0641	80.1	49.0-129	
Fluorene	0.0800	0.0652	81.5	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0609	76.1	46.0-125	
1-Methylnaphthalene	0.0800	0.0643	80.4	51.0-121	
2-Methylnaphthalene	0.0800	0.0648	81.0	50.0-120	
Naphthalene	0.0800	0.0686	85.8	50.0-120	
Pyrene	0.0800	0.0658	82.3	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R3838528-1 09/17/22 11:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*86.1*	*23.0-120*	
(S) Nitrobenzene-d5			*84.1*	*14.0-149*	
(S) 2-Fluorobiphenyl			*84.1*	*34.0-125*	

L1534450-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1534450-07 09/17/22 11:37 • (MS) R3838528-3 09/17/22 11:55 • (MSD) R3838528-4 09/17/22 12:13

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 %
Acenaphthene	0.0776	U	0.0982	0.0428	127	54.6	1	14.0-127		J3	78.6	27
Anthracene	0.0776	U	0.0914	0.0416	118	53.1	1	10.0-145		J3	74.9	30
Benzo(a)anthracene	0.0776	U	0.0921	0.0424	119	54.1	1	10.0-139		J3	73.9	30
Benzo(b)fluoranthene	0.0776	U	0.0872	0.0405	112	51.7	1	10.0-140		J3	73.1	36
Benzo(k)fluoranthene	0.0776	U	0.0936	0.0451	121	57.5	1	10.0-137		J3	69.9	31
Benzo(a)pyrene	0.0776	U	0.0978	0.0478	126	61.0	1	10.0-141		J3	68.7	31
Chrysene	0.0776	U	0.0998	0.0493	129	62.9	1	10.0-145		J3	67.7	30
Dibenz(a,h)anthracene	0.0776	U	0.0921	0.0454	119	57.9	1	10.0-132		J3	67.9	31
Fluoranthene	0.0776	U	0.0943	0.0431	122	55.0	1	10.0-153		J3	74.5	33
Fluorene	0.0776	U	0.0971	0.0434	125	55.4	1	11.0-130		J3	76.4	29
Indeno(1,2,3-cd)pyrene	0.0776	U	0.0919	0.0438	118	55.9	1	10.0-137		J3	70.9	32
1-Methylnaphthalene	0.0776	U	0.0965	0.0419	124	53.4	1	10.0-142		J3	78.9	28
2-Methylnaphthalene	0.0776	U	0.0964	0.0435	124	55.5	1	10.0-137		J3	75.6	28
Naphthalene	0.0776	U	0.0966	0.0446	124	56.9	1	10.0-135		J3	73.7	27
Pyrene	0.0776	U	0.0962	0.0450	124	57.4	1	10.0-148		J3	72.5	35
(S) p-Terphenyl-d14					*64.3*	*58.4*		*23.0-120*				
(S) Nitrobenzene-d5					*74.8*	*62.2*		*14.0-149*				
(S) 2-Fluorobiphenyl					*67.1*	*54.0*		*34.0-125*				

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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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.

A148

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

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

L1534450

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Company: Confluence Compliance Companies

Billing Information: Info on file

Address: Info on file

Report To: Chris McKisson

Email To: Info on file

Copy To: chris.mckisson@confluence-cc.com
remediation@confluence-cc.com
sage.maher@confluence-cc.com

Site Collection Info/Address:

Customer Project Name/Number:

State: / County/City: Time Zone Collected: [ ]PT [X]MT [ ]CT [ ]ET

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 _____

Phone:
Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [X] No

Collected By (print):

Purchase Order # :
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature):

Turnaround Date Required:

Immediately Packed on Ice: [ ] 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	EC, SAR, pH	Boron (hot Water soluble)	TPH (GRO/DRO/ORO)	Table 915-1 VOCs	Table 915-1 PAHs	Table 915-1 Metals	Cr6	
220906_Apache_Bottom-Hole_CS1(1015)13.5'	SL	Grab	9/6/2022	10:15				4	g	x	x	x	x	x	x	x	
220906_Apache_Bottom-Hole_CS2(1030)13.5'	SL	Grab	9/6/2022	10:30				4	g	x	x	x	x	x	x	x	
220906_Apache_Side-Wall_CS3(1040)7.0'	SL	Grab	9/6/2022	10:40				4	g	x	x	x	x	x	x	x	
220906_Apache_Side-Wall_CS4(1050)7.0'	SL	Grab	9/6/2022	10:50				4	g	x	x	x	x	x	x	x	
220906_Apache_Side-Wall_CS5(1100)7.0'	SL	Grab	9/6/2022	11:00				4	g	x	x	x	x	x	x	x	
220906_Apache_Side-Wall_CS6(1115)7.0'	SL	Grab	9/6/2022	11:15				5	g	x	x	x	x	x	x	x	
220906_Apache_Water-FL_at_Pit_CS7(1200)4.5'	SL	Grab	9/6/2022	12:00				4	g	x	x	x	x	x	x	x	
220906_Apache_Water-FL_at_Meter-House_CS8(1210)3.5'	SL	Grab	9/6/2022	12:10				4	g	x	x	x	x	x	x	x	
220906_Apache_Meter-House_CS9(1220)4.5'	SL	Grab	9/6/2022	12:20				4	g	x	x	x	x	x	x	x	
220906_Apache_Gas-FL_at_Meter-House_CS10(1230)3.5'	SL	Grab	9/6/2022	12:30				4	g	x	x	x	x	x	x	x	
220906_Apache_Gas-FL_at_WH_CS11(1240)3.5'	SL	Grab	9/6/2022	12:40				4	g	x	x	x	x	x	x	x	
220906_Apache_Water-FL_Gas-FL_to_SWD_Sale_CS12(1330)4.5'	SL	Grab	9/6/2022	13:30				4	g	x	x	x	x	x	x	x	
220906_Apache_Stockpile_SP1(1130)	SL	Comp	9/6/2022	11:30	9/6/2022	11:40		4	g	x	x	x	x	x	x	x	

Analyses

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:

-01
-02
-03
-04
-05
-06
-07
-08
-09
-10

Customer Remarks / Special Conditions / Possible Hazards:

USE THIS COC

Type of Ice Used: Wet Blue Dry None

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Packing Material Used:

Lab Tracking #: 5829 6703 2324

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

Samples received via: FEDEX UPS Client Courier Pace Courier

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: RRA6
4.7+0.1=4.8

Relinquished by/Company: (Signature)	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:

9/9/22 845

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: ____

L1534480

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

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

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

Company: Confluence Compliance Companies

Address: Info on file

Report To: Chris McKisson

Copy To: chris.mckisson@confluence-cc.com
remediation@confluence-cc.com
sage.maher@confluence-cc.com

Billing Information:
Info on file

Email To: Info on file

Site Collection Info/Address:

State: County/City: Time Zone Collected:
[ ]PT [X]MT [ ]CT [ ]ET

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 _____

Customer Project Name/Number: XTO Apache Canyon

Phone: (901) 680 5338
Email: tim.freeman@confluence-cc.com

Site/Facility ID #: 217411

Compliance Monitoring?
[ ] Yes [X] No

Collected By (print): Tim Freeman

Purchase Order # :
Quote #:

DW PWS ID #:
DW Location Code:

Collected By (signature):

Turnaround Date Required:

Immediately Packed on ice:
[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)

Analyses

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:

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	EC, SAR, pH	Boron (hot Water soluble)	TPH (GRO/DRO/ORO)	Table 915-1 VOCs	Table 915-1 PAHs	Table 915-1 Metals	Cr6	Lab Sample # / Comments
220906_Apache-Canyon_Bottom-Hole_CS1@13.5	SL	Grab	9/6/2022	10:15				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Bottom-Hole_CS2@13.5	SL	Grab	9/6/2022	10:30				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Side-Wall_CS3@7.0	SL	Grab	9/6/2022	10:40				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Side-Wall_CS4@7.0	SL	Grab	9/6/2022	10:50				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Side-Wall_CS5@7.0	SL	Grab	9/6/2022	11:00				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Side-Wall_CS6@7.0	SL	Grab	9/6/2022	11:15				5	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Water-FL_at_Pit_CS7@4.5	SL	Grab	9/6/2022	12:00				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Water-FL_at_Meter-House_CS8@3.5	SL	Grab	9/6/2022	12:10				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Meter-House_CS9@4.5	SL	Grab	9/6/2022	12:20				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Gas-FL_at_Meter-House_CS10@3.5	SL	Grab	9/6/2022	12:30				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Gas-FL_at_WH_CS11@3.5	SL	Grab	9/6/2022	12:40				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Water-FL_Gas-FL_to_SWD_Sale_CS10@4.5	SL	Grab	9/6/2022	13:30				4	g	x	x	x	x	x	x	x	
220906_Apache-Canyon_Stockpile_SP1	SL	Comp	9/6/2022	11:30	9/6/2022	11:40		4	g	x	x	x	x	x	x	x	

Customer Remarks / Special Conditions / Possible Hazards:

use other COC

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

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

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via:
FEDEX UPS Client Courier Pace Courier

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:

	Date/Time	Received by/Company: (Signature)	Date/Time
Relinquished by/Company: (Signature) Tim Freeman/Confluence	9/7/22 20:00	Received by/Company: (Signature) Date courier	9/7/22 20:00
Relinquished by/Company: (Signature)	9/8/22 0100	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): YES / NO

Page: ____ of: ____

9/9 - NCF-L1534450 CONCOMGJCO

R5

Time estimate: oh **Time spent:** oh **Grouping date:** 13 September 2022

Members

Robert Rountree (responsible) Chris Ward Cole Medley

~~Due on *16 September 2022 5:00 PM* for target *Done*~~ (Was done by Cole Medley at 13 September 2022 8:40 AM)

- [x] Login Clarification needed
- [ ] Chain of custody is incomplete
- [ ] Please specify Metals requested
- [ ] Please specify TCLP requested
- [ ] Received additional samples not listed on COC
- [ ] Sample IDs on containers do not match IDs on COC
- [ ] Client did not "X" analysis
- [ ] Chain of Custody is missing
- [ ] If no COC: Received by:_____
- [ ] If no COC: Date/Time:_____
- [ ] If no COC: Temp./Cont.Rec./pH:_____
- [ ] If no COC: Carrier:_____
- [ ] If no COC: Tracking #:_____
- [ ] Client informed by call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____
- [ ] PM initials:_____
- [ ] Client Contact:_____

Comments

Robert Rountree *10 September 2022 2:04 PM*

Did not receive the following samples in cooler;

220906_Apache_Bottom-Hole_CS1(1015)13.5'
220906_Apache_Water-FL_at_Meter-House_CS8(1210)3.5'
220906_Apache_Gas-FL_at_Meter-House_CS10(1230)3.5'

Chris Ward *12 September 2022 11:54 AM*

Samples found in NCF for L1533916

Cole Medley *13 September 2022 8:40 AM*

Done.

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 14, 2022

Chris McKisson
XTO
on file
on file, ON FILE 80401

RE: Apache Canyon 6-9V
Work Order #2210109

Enclosed are the results of analyses for samples received by Summit Scientific on 10/07/22 12:26. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mikayla Axtell For Paul Shrewsbury
President

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 15:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
221006_Apache_Bottom-Hole_CS1(1100)14.5'	2210109-01	Soil	10/06/22 11:00	10/07/22 12:26
221006_Apache_Stockpile_SP1(1400)	2210109-02	Soil	10/06/22 14:00	10/07/22 12:26

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2210109

S2

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: XTO | Project Manager: Chris McKisson

Address: On File | E-Mail: On File (Confluence) plus cmckisson@confluence-cc.com

City/State/Zip: On File

Phone: On file (Confluence) plus (801) 680-5338 | Project Name: Apache Canyon 6-9V

Sampler Name: Timothy Freeman | Project Number: XTO220314-0001

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	ICE	Water	Soil	Air-Canister #	Other ___		EC, SAR, pH	Boron (Hot Water Soluble)	TPH (GRO/DRP/ORO)	Table 915-1 PAHs	Table 915-1 Metals	C16	SAR	
1	221006_Apache_Bottom-Hole_CS1(1100)14.5'	10/6/2022	1100	3				X												X	Rush
2	221006_Apache_Stockpile_SP1(1400)	10/6/2022	1400	3				X								X					Standard
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: [signature]	Date/Time: 12:26 10/7/22	Received by: [signature]	Date/Time: 10/7/22 12:26
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)

Same Day X | 72 hours ___

24 hours ___ | Standard ___

48 hours ___

Sample Integrity:

Temperature Upon Receipt: 6.3

Samples Intact: (Yes) No

Notes: Hold Remaining volumes for potential 915 analysis

S2

S2 Work Order# 2210109

Sample Receipt Checklist

Client: XTO Client Project ID: Apache Canyon 6-9 V

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other [X] Airbill #:

Matrix (Check all that apply) Air [ ] Soil/Solid [X] Water [ ] Other [ ]

Temp (°C) 6-3 Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? (1) **NOTE:** If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	X			on ice
If custody seals are present, are they intact? (1)			X	
Are samples due within 48 hours present?	X			Sample LS1
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe^{2+}), Hexavalent Chromium (Cr^{6+}, Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen			X	
Is a chain-of-custody (COC) form present and filled out Completely? (1)	X			
Is the COC properly relinquished by the client w/ date and time recorded? (1)	X			
Were all samples received intact? (1)	X			
Was adequate sample volume provided? (1)	X			
Does the COC agree with the number and type of sample bottles received? (1)	X			
Do the sample IDs on the bottle labels match the COC?(1)	X			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			X	
Are samples preserved that require preservation **(excluding cooling)?** (1) Note the type of preservative in the comments column – HCl, H_2SO_4, NaOH, HNO_3, etc.			X	
If samples are acid preserved for metals, is the pH ≤ 2? (1) Record the pH in Comments.			X	
If dissolved metals are requested, were samples field filtered?			X	

Additional Comments (if any):

Sample LS1 is quick turn, Sample SP1 is standard

(1) **If NO, then contact the client before proceeding with analysis and note in case narrative.**

JMO
Custodian Printed Name

10/7/22
Date/Time

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 15:58

221006_Apache_Bottom-Hole_CS1(1100)14.5'

2210109-01 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/06/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**9.53**	0.0537	mg/L dry	1	BFJ0295	10/12/22	10/14/22	EPA 6020B	
Magnesium	**4.08**	0.0537	"	"	"	"	"	"	
Sodium	**252**	0.0537	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/06/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**17.2**	0.00100	units	1	BFJ0371	10/14/22	10/14/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/06/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**93.2**		%	1	BFJ0288	10/12/22	10/13/22	Calculation	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 15:58

221006_Apache_Stockpile_SP1(1400)

2210109-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/06/22 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Gasoline Range Hydrocarbons	ND	0.50	mg/kg	1	BFJ0305	10/12/22	10/14/22	EPA 8260B	

Date Sampled: **10/06/22 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*133 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*105 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/06/22 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0306	10/12/22	10/13/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/06/22 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*57.8 %*	*30-150*		"	"	"	"	

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 15:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0305 - EPA 5030 Soil MS										
Blank (BFJ0305-BLK1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Gasoline Range Hydrocarbons	ND	0.50	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	*0.0526*		*"*	*0.0400*		*131*	*23-173*			
Surrogate: Toluene-d8	*0.0421*		*"*	*0.0400*		*105*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0416*		*"*	*0.0400*		*104*	*21-167*			
LCS (BFJ0305-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Surrogate: 1,2-Dichloroethane-d4	*0.0495*		*mg/kg*	*0.0400*		*124*	*23-173*			
Surrogate: Toluene-d8	*0.0438*		*"*	*0.0400*		*110*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0448*		*"*	*0.0400*		*112*	*21-167*			
Matrix Spike (BFJ0305-MS1)		**Source: 2210116-01**		Prepared: 10/12/22 Analyzed: 10/14/22						
Surrogate: 1,2-Dichloroethane-d4	*0.0470*		*mg/kg*	*0.0400*		*117*	*23-173*			
Surrogate: Toluene-d8	*0.0438*		*"*	*0.0400*		*110*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0443*		*"*	*0.0400*		*111*	*21-167*			
Matrix Spike Dup (BFJ0305-MSD1)		**Source: 2210116-01**		Prepared: 10/12/22 Analyzed: 10/14/22						
Surrogate: 1,2-Dichloroethane-d4	*0.0527*		*mg/kg*	*0.0400*		*132*	*23-173*			
Surrogate: Toluene-d8	*0.0436*		*"*	*0.0400*		*109*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0445*		*"*	*0.0400*		*111*	*21-167*			

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 15:58

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0306 - EPA 3550A										
Blank (BFJ0306-BLK1)				Prepared: 10/12/22 Analyzed: 10/13/22						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BFJ0306-BS1)				Prepared: 10/12/22 Analyzed: 10/13/22						
C10-C28 (DRO)	600	50	mg/kg	500		120	70-130			
Matrix Spike (BFJ0306-MS1)	**Source: 2210116-01**			Prepared: 10/12/22 Analyzed: 10/13/22						
C10-C28 (DRO)	566	50	mg/kg	500	ND	113	70-130			
Matrix Spike Dup (BFJ0306-MSD1)	**Source: 2210116-01**			Prepared: 10/12/22 Analyzed: 10/13/22						
C10-C28 (DRO)	537	50	mg/kg	500	ND	107	70-130	5.31	20	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 15:58

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0295 - General Preparation										
Blank (BFJ0295-BLK1)				Prepared: 10/12/22 Analyzed: 10/13/22						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BFJ0295-BS1)				Prepared: 10/12/22 Analyzed: 10/13/22						
Calcium	5.45	0.0500	mg/L wet				70-130			
Magnesium	5.72	0.0500	"				70-130			
Sodium	5.49	0.0500	"				70-130			

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 15:58

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0288 - General Preparation										
Duplicate (BFJ0288-DUP1)	**Source: 2210104-01**			Prepared: 10/12/22 Analyzed: 10/13/22						
% Solids	80.6		%		80.9			0.338	20	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 15:58

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

December 12, 2022

Chris McKisson
XTO
403 1/2 Rockwood Lane
Grand Junction, CO 81507

RE: Apache Canyon 6-9V
Work Order #2212055

Enclosed are the results of analyses for samples received by Summit Scientific on 12/02/22 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mikayla Axtell For Paul Shrewsbury
President

S2

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
221130_Apache_Canyon_BG(0940)@1.0	2212055-01	Soil	12/01/22 09:40	12/02/22 16:00
221130_Apache_Canyon_BG(1005)@1.0	2212055-02	Soil	12/01/22 10:05	12/02/22 16:00
221130_Apache_Canyon_BG(1020)@1.0	2212055-03	Soil	12/01/22 10:20	12/02/22 16:00
221130_Apache_Canyon_BG(1025)@0.5	2212055-04	Soil	12/01/22 10:25	12/02/22 16:00
221130_Apache_Canyon_BG(1035)@0.5	2212055-05	Soil	12/01/22 10:35	12/02/22 16:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2212055

S2

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: XTO | Project Manager: Chris McKisson

Address: | E-Mail: chris.mckisson@confluence-cc.com

City/State/Zip:

Phone: 720-384-6452 / 801-680-5338 | Project Name: XTO_Apache_Canyon_6-9V

Sampler Name: Timothy Freeman | Project Number: XT0003

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other ICE	Water	Soil	Air-Canister #	Other		SAR	pH	Arsenic					
1	221130_Apache_Canyopn_BG(0940)@1.0	12/1/2022	9:40	2				X		X	NA			X	X	X					
2	221130_Apache_Canyopn_BG(1005) @1.0	12/1/2022	10:05	2						X	NA			X	X	X					
3	221130_Apache_Canyopn_BG(1020) @1.0	12/1/2022	10:20	2						X	NA			X	X	X					
4	221130_Apache_Canyopn_BG(1025) @0.5	12/1/2022	10:25	2						X	NA			X	X	X					
5	221130_Apache_Canyopn_BG(1035) @0.5	12/1/2022	10:35	2						X	NA			X	X	X					
6																					
7																					
8																					
9																					
10																					
11																					

Relinquished by:	Date/Time:	Received by:	Date/Time:
Tim Freeman	12/2/22 13:54	S2	12222 1354
S2	12222 1600		12222 1600
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)

Same Day ___ 72 hours ___

24 hours ___ Standard X

48 hours ___

Sample Integrity:

Temperature Upon Receipt: 8.3

Samples Intact: Yes No

Notes:

S2

Sample Receipt Checklist

S2 Work Order# 2212055

Client: XTO Client Project ID: XTO Apache Canyon 6-9 U

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other [ ] Airbill #: _____

[ ] [-] [ ] [ ] [ ]

Matrix (Check all that apply) Air [ ] Soil/Solid [ ] Water [ ] Other [ ]

Temp (°C) [8.3] Thermometer # [1]

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? (1) **NOTE:** If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			on ice
If custody seals are present, are they intact? (1)	-			
Are samples due within 48 hours present?		-		
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe^{2+}), Hexavalent Chromium (Cr^{6+}, Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen			-	
Is a chain-of-custody (COC) form present and filled out Completely? (1)	-			
Is the COC properly relinquished by the client w/ date and time recorded? (1)	-			
Were all samples received intact? (1)	-			
Was adequate sample volume provided? (1)	-			
Does the COC agree with the number and type of sample bottles received? (1)	-			
Do the sample IDs on the bottle labels match the COC? (1)	-			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			-	
Are samples preserved that require preservation **(excluding cooling)?** (1) Note the type of preservative in the comments column – HCl, H_2SO_4, NaOH, HNO_3, etc.			-	
If samples are acid preserved for metals, is the pH ≤ 2? (1) Record the pH in Comments.			-	
If dissolved metals are requested, were samples field filtered?			-	
Additional Comments (if any):				
(1) If NO, then contact the client before proceeding with analysis and note in case narrative.				

Custodian Printed Name

12-2-22
Date/Time

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

221130_Apache_Canyon_BG(0940)@1.0

2212055-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/01/22 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	**0.936**	0.200	mg/kg dry	1	BFL0122	12/06/22	12/07/22	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/01/22 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**31.1**	0.0557	mg/L dry	1	BFL0119	12/05/22	12/07/22	EPA 6020B	
Magnesium	**17.8**	0.0557	"	"	"	"	"	"	
Sodium	**0.808**	0.0557	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/01/22 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**0.0286**	0.00100	units	1	BFL0185	12/07/22	12/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/01/22 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**89.8**		%	1	BFL0124	12/05/22	12/06/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/01/22 09:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**6.16**		pH Units	1	BFL0145	12/06/22	12/06/22	EPA 9045D	

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

221130_Apache_Canyon_BG(1005)@1.0

2212055-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/01/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	**1.11**	0.200	mg/kg dry	1	BFL0122	12/06/22	12/07/22	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/01/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**25.3**	0.0576	mg/L dry	1	BFL0119	12/05/22	12/07/22	EPA 6020B	
Magnesium	**7.17**	0.0576	"	"	"	"	"	"	
Sodium	**1.55**	0.0576	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/01/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**0.0701**	0.00100	units	1	BFL0185	12/07/22	12/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/01/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**86.8**		%	1	BFL0124	12/05/22	12/06/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/01/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.43**		pH Units	1	BFL0145	12/06/22	12/06/22	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

221130_Apache_Canyon_BG(1020)@1.0

2212055-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/01/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	**1.75**	0.200	mg/kg dry	1	BFL0122	12/06/22	12/07/22	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/01/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**54.9**	0.0587	mg/L dry	1	BFL0119	12/05/22	12/07/22	EPA 6020B	
Magnesium	**25.2**	0.0587	"	"	"	"	"	"	
Sodium	**1.15**	0.0587	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/01/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**0.0322**	0.00100	units	1	BFL0185	12/07/22	12/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/01/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**85.2**		%	1	BFL0124	12/05/22	12/06/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/01/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.09**		pH Units	1	BFL0145	12/06/22	12/06/22	EPA 9045D	

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

221130_Apache_Canyon_BG(1025)@0.5

2212055-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/01/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	**1.39**	0.200	mg/kg dry	1	BFL0122	12/06/22	12/07/22	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/01/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**29.1**	0.0570	mg/L dry	1	BFL0119	12/05/22	12/07/22	EPA 6020B	
Magnesium	**13.3**	0.0570	"	"	"	"	"	"	
Sodium	**8.82**	0.0570	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/01/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**0.340**	0.00100	units	1	BFL0185	12/07/22	12/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/01/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**87.8**		%	1	BFL0124	12/05/22	12/06/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/01/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.82**		pH Units	1	BFL0145	12/06/22	12/06/22	EPA 9045D	

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

221130_Apache_Canyon_BG(1035)@0.5

2212055-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **12/01/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	**2.28**	0.200	mg/kg dry	1	BFL0122	12/06/22	12/07/22	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **12/01/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**53.2**	0.0617	mg/L dry	1	BFL0119	12/05/22	12/07/22	EPA 6020B	
Magnesium	**21.2**	0.0617	"	"	"	"	"	"	
Sodium	**0.434**	0.0617	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **12/01/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**0.0127**	0.00100	units	1	BFL0185	12/07/22	12/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **12/01/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**81.0**		%	1	BFL0124	12/05/22	12/06/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **12/01/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**6.80**		pH Units	1	BFL0145	12/06/22	12/06/22	EPA 9045D	

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

Total Metals by EPA 6020B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFL0122 - EPA 3050B										
Blank (BFL0122-BLK1)				Prepared: 12/06/22 Analyzed: 12/07/22						
Arsenic	ND	0.200	mg/kg wet							
LCS (BFL0122-BS1)				Prepared: 12/06/22 Analyzed: 12/07/22						
Arsenic	41.1	0.200	mg/kg wet	40.0		103	80-120			
Duplicate (BFL0122-DUP1)		**Source: 2212055-01**		Prepared: 12/06/22 Analyzed: 12/07/22						
Arsenic	0.994	0.200	mg/kg dry		0.936			6.02	20	
Matrix Spike (BFL0122-MS1)		**Source: 2212055-01**		Prepared: 12/06/22 Analyzed: 12/07/22						
Arsenic	40.8	0.200	mg/kg dry	44.5	0.936	89.5	75-125			
Matrix Spike Dup (BFL0122-MSD1)		**Source: 2212055-01**		Prepared: 12/06/22 Analyzed: 12/07/22						
Arsenic	42.7	0.200	mg/kg dry	44.5	0.936	93.7	75-125	4.53	25	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFL0119 - General Preparation										
Blank (BFL0119-BLK1)				Prepared: 12/05/22 Analyzed: 12/07/22						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BFL0119-BS1)				Prepared: 12/05/22 Analyzed: 12/07/22						
Calcium	3.95	0.0500	mg/L wet	5.00		79.0	70-130			
Magnesium	4.10	0.0500	"	5.00		82.0	70-130			
Sodium	3.91	0.0500	"	5.00		78.2	70-130			

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFL0124 - General Preparation										
Duplicate (BFL0124-DUP1)	**Source: 2212055-01**			Prepared: 12/05/22 Analyzed: 12/06/22						
% Solids	91.5		%		89.8			1.90	20	

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFL0145 - General Preparation										
LCS (BFL0145-BS1)				Prepared & Analyzed: 12/06/22						
pH	9.17		pH Units	9.18		99.9	95-105			
Duplicate (BFL0145-DUP1)		**Source: 2212055-01**		Prepared & Analyzed: 12/06/22						
pH	6.38		pH Units		6.16			3.51	20	

S2

XTO 403 1/2 Rockwood Lane Grand Junction CO, 81507	Project: Apache Canyon 6-9V Project Number: XT0003 Project Manager: Chris McKisson	**Reported:** 12/12/22 10:41

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 14, 2022

Chris McKisson
XTO
on file
on file, ON FILE 80401

RE: Apache Canyon 6-9V
Work Order #2210112

Enclosed are the results of analyses for samples received by Summit Scientific on 10/07/22 12:26. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mikayla Axtell For Paul Shrewsbury
President

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
221006_Apache_Canyon_BG(1205)1.25'	2210112-01	Soil	10/06/22 00:00	10/07/22 12:26

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

S2

2210112

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: XTO | Project Manager: Chris McKisson

Address: On File | E-Mail: On File (Confluence) plus cmckisson@confluence-cc.com

City/State/Zip: On File

Phone: On file (Confluence) plus (801) 680-5338 | Project Name: Apache Canyon 6-9V

Sampler Name: Timothy Freeman | Project Number: XTO220314-0001

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other ____	Water	Soil	Air-Canister #	Other ____	This	EC, SAR, pH	Boron (Hot Water Soluble)	TPH (GRO/DRP/ORO)	Table 915-1 PAHs	Table 915-1 Metals	C16		
1	221006_Apache_Canyon_BG(1205)1.25'			3						X				X							
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time: 12:26 10/7/22	Received by:	Date/Time: 10/7/22 12:26
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)

Same Day ___ 72 hours ___

24 hours ___ Standard X

48 hours ___

Sample Integrity:

Temperature Upon Receipt: 5.7

Samples Intact: (Yes) No

S2

2210112

Sample Receipt Checklist

S2 Work Order#_____

Client: Terracon **Client Project ID:** Arapahoe Village

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other_____ Airbill #:_____

X				

Matrix (Check all that apply) Air [ ] Soil/Solid [ ] Water [X] Other [ ]

Temp (°C) 4.4 Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? (1) **NOTE:** If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	X			on ice
If custody seals are present, are they intact? (1)			X	
Are samples due within 48 hours present?			X	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe^{2+}), Hexavalent Chromium (Cr^{6+}, Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen			X	
Is a chain-of-custody (COC) form present and filled out Completely? (1)	X			
Is the COC properly relinquished by the client w/ date and time recorded? (1)	X			
Were all samples received intact? (1)	X			
Was adequate sample volume provided? (1)	X			
Does the COC agree with the number and type of sample bottles received? (1)	X			
Do the sample IDs on the bottle labels match the COC?(1)	X			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**		X		
Are samples preserved that require preservation **(excluding cooling)?** (1) Note the type of preservative in the comments column – HCl, H_2SO_4, NaOH, HNO_3, etc.			X	
If samples are acid preserved for metals, is the pH ≤ 2? (1) Record the pH in Comments.			X	
If dissolved metals are requested, were samples field filtered?			X	
Additional Comments (if any):				

(1) **If NO, then contact the client before proceeding with analysis and note in case narrative.**

JMO
Custodian Printed Name

10/7/22
Date/Time

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:41

221006_Apache_Canyon_BG(1205)1.25'

2210112-01 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/06/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**22.9**	0.0587	mg/L dry	1	BFJ0297	10/12/22	10/14/22	EPA 6020B	
Magnesium	**10.4**	0.0587	"	"	"	"	"	"	
Sodium	**37.7**	0.0587	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/06/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**1.64**	0.00100	units	1	BFJ0369	10/14/22	10/14/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/06/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**85.1**		%	1	BFJ0288	10/12/22	10/13/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/06/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.318**	0.0100	mmhos/cm	1	BFJ0304	10/12/22	10/14/22	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/06/22 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.96**		pH Units	1	BFJ0303	10/12/22	10/14/22	EPA 9045D	

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:41

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0297 - General Preparation										
Blank (BFJ0297-BLK1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BFJ0297-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Calcium	5.24	0.0500	mg/L wet	5.00		105	70-130			
Magnesium	6.03	0.0500	"	5.00		121	70-130			
Sodium	5.79	0.0500	"	5.00		116	70-130			

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:41

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0288 - General Preparation										
Duplicate (BFJ0288-DUP1)	**Source: 2210104-01**			Prepared: 10/12/22 Analyzed: 10/13/22						
% Solids	80.6		%		80.9			0.338	20	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:41

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0304 - General Preparation										
Blank (BFJ0304-BLK1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
LCS (BFJ0304-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	0.152	0.0100	mmhos/cm	0.150		102	95-105			
Duplicate (BFJ0304-DUP1)	**Source: 2210110-01**			Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	0.122	0.0100	mmhos/cm		0.122			0.0817	20	

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:41

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0303 - General Preparation										
LCS (BFJ0303-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
pH	8.95		pH Units	9.18		97.5	95-105			
Duplicate (BFJ0303-DUP1)		**Source: 2210110-01**		Prepared: 10/12/22 Analyzed: 10/14/22						
pH	7.65		pH Units		7.63			0.262	20	

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:41

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 14, 2022

Chris McKisson
XTO
on file
on file, ON FILE 80401

RE: Apache Canyon 6-9V
Work Order #2210111

Enclosed are the results of analyses for samples received by Summit Scientific on 10/07/22 12:26. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mikayla Axtell For Paul Shrewsbury
President

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
221006_Apache_Canyon_BG(1250)1.0'	2210111-01	Soil	10/06/22 15:00	10/07/22 12:26

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2210111

S2

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: XTO | Project Manager: Chris McKisson

Address: On File | E-Mail: On File (Confluence) plus cmckisson@confluence-cc.com

City/State/Zip: On File

Phone: On file (Confluence) plus (801) 680-5338 | Project Name: Apache Canyon 6-9V

Sampler Name: Timothy Freeman | Project Number: XTO220314-0001

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other ___	Water	Soil	Air-Canister #	Other ___	This	EC, SAR, pH	Boron (Hot Water Soluble)	TPH (GRO/DRP/ORO)	Table 915-1 PAHs	Table 915-1 Metals	C16		
1	221006_Apache_Canyon_BG(1250)1.0'			3						X				X							
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time:	Received by:	Date/Time:
[signature]	12:26 10/7/22	[signature]	10/7/22 12:26
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)

Same Day ___ 72 hours ___

24 hours ___ Standard X

48 hours ___

Sample Integrity:

Temperature Upon Receipt: 12.4

Samples Intact: (Yes) No

S2

2210111

S2 Work Order#_____

Sample Receipt Checklist

Client: XTO Client Project ID: Apache Canyon 6-9U

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other_____ Airbill #:_____

X				

Matrix (Check all that apply) Air [ ] Soil/Solid [X] Water [ ] Other [ ]

Temp (°C) 12.4 Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? (1) **NOTE:** If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	X			on ice
If custody seals are present, are they intact? (1)			X	
Are samples due within 48 hours present?			X	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe^{2+}), Hexavalent Chromium (Cr^{6+}, Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen			X	
Is a chain-of-custody (COC) form present and filled out Completely? (1)	X			
Is the COC properly relinquished by the client w/ date and time recorded? (1)	X			
Were all samples received intact? (1)	X			
Was adequate sample volume provided? (1)	X			
Does the COC agree with the number and type of sample bottles received? (1)	X			
Do the sample IDs on the bottle labels match the COC?(1)	X			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			X	
Are samples preserved that require preservation **(excluding cooling)?** (1) Note the type of preservative in the comments column – HCl, H_2SO_4, NaOH, HNO_3, etc.			X	
If samples are acid preserved for metals, is the pH ≤ 2? (1) Record the pH in Comments.			X	
If dissolved metals are requested, were samples field filtered?			X	
Additional Comments (if any):				
(1) **If NO, then contact the client before proceeding with analysis and note in case narrative.**				

DMO
Custodian Printed Name

10/7/21
Date/Time

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:36

221006_Apache_Canyon_BG(1250)1.0'

2210111-01 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**17.4**	0.0535	mg/L dry	1	BFJ0297	10/12/22	10/14/22	EPA 6020B	
Magnesium	**6.08**	0.0535	"	"	"	"	"	"	
Sodium	**4.56**	0.0535	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**0.240**	0.00100	units	1	BFJ0369	10/14/22	10/14/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**93.5**		%	1	BFJ0288	10/12/22	10/13/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.162**	0.0100	mmhos/cm	1	BFJ0304	10/12/22	10/14/22	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.52**		pH Units	1	BFJ0303	10/12/22	10/14/22	EPA 9045D	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:36

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0297 - General Preparation										
Blank (BFJ0297-BLK1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BFJ0297-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Calcium	5.24	0.0500	mg/L wet	5.00		105	70-130			
Magnesium	6.03	0.0500	"	5.00		121	70-130			
Sodium	5.79	0.0500	"	5.00		116	70-130			

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:36

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0288 - General Preparation										
Duplicate (BFJ0288-DUP1)	**Source: 2210104-01**			Prepared: 10/12/22 Analyzed: 10/13/22						
% Solids	80.6		%		80.9			0.338	20	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:36

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0304 - General Preparation										
Blank (BFJ0304-BLK1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
LCS (BFJ0304-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	0.152	0.0100	mmhos/cm	0.150		102	95-105			
Duplicate (BFJ0304-DUP1)	**Source: 2210110-01**			Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	0.122	0.0100	mmhos/cm		0.122			0.0817	20	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:36

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0303 - General Preparation										
LCS (BFJ0303-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
pH	8.95		pH Units	9.18		97.5	95-105			
Duplicate (BFJ0303-DUP1)		**Source: 2210110-01**		Prepared: 10/12/22 Analyzed: 10/14/22						
pH	7.65		pH Units		7.63			0.262	20	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:36

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 14, 2022

Chris McKisson
XTO
on file
on file, ON FILE 80401

RE: Apache Canyon 6-9V
Work Order #2210110

Enclosed are the results of analyses for samples received by Summit Scientific on 10/07/22 12:26. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Mikayla Axtell For Paul Shrewsbury
President

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
221006_Apache_Canyon_BG(1500)1.5'	2210110-01	Soil	10/06/22 15:00	10/07/22 12:26

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

S_2

2210110

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Client: XTO | Project Manager: Chris McKisson

Address: On File | E-Mail: On File (Confluence) plus cmckisson@confluence-cc.com

City/State/Zip: On File

Phone: On file (Confluence) plus (801) 680-5338 | Project Name: Apache Canyon 6-9V

Sampler Name: Timothy Freeman | Project Number: XTO220314-0001

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	ICE	Water	Soil	Air-Canister #	Other ____		EC, SAR, pH	Boron (Hot Water Soluble)	TPH (GRO/DRP/ORO)	Table 915-1 PAHs	Table 915-1 Metals	C16		
1	221006_Apache_Canyon_BG(1500)1.5'	10/6/2022	1500	3				x		x				X							
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time:	Received by:	Date/Time:
[signature]	12:26 10/7/22	[signature] OL	10/7/22 12:26
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)

Same Day ___ 72 hours ___

24 hours ___ Standard X

48 hours ___

Sample Integrity:

Temperature Upon Receipt: 6.7

Samples Intact: Yes No

S2

2210110

Sample Receipt Checklist

S2 Work Order#_____

Client: XTO Client Project ID: Apache Canyon 6-9V

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other_____ Airbill #:_____

X				

Matrix (Check all that apply) Air [ ] Soil/Solid [X] Water [ ] Other [ ]

Temp (°C) 5.7 Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? (1) **NOTE:** If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	X			on ice
If custody seals are present, are they intact? (1)			X	
Are samples due within 48 hours present?			X	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe^{2+}), Hexavalent Chromium (Cr^{6+}, Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	JMO		X	
Is a chain-of-custody (COC) form present and filled out Completely? (1)	X			
Is the COC properly relinquished by the client w/ date and time recorded? (1)	X			
Were all samples received intact? (1)	X			
Was adequate sample volume provided? (1)	X			
Does the COC agree with the number and type of sample bottles received? (1)	X			
Do the sample IDs on the bottle labels match the COC?(1)	X			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			X	
Are samples preserved that require preservation **(excluding cooling)?** (1) Note the type of preservative in the comments column – HCl, H_2SO_4, NaOH, HNO_3, etc.			X	
If samples are acid preserved for metals, is the pH ≤ 2? (1) Record the pH in Comments.			X	
If dissolved metals are requested, were samples field filtered?			X	
Additional Comments (if any):				

(1) If NO, then contact the client before proceeding with analysis and note in case narrative.

JMO
Custodian Printed Name

10/7/22
Date/Time

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:31

221006_Apache_Canyon_BG(1500)1.5'

2210110-01 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**11.8**	0.0559	mg/L dry	1	BFJ0297	10/12/22	10/14/22	EPA 6020B	
Magnesium	**5.79**	0.0559	"	"	"	"	"	"	
Sodium	**4.88**	0.0559	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**0.291**	0.00100	units	1	BFJ0369	10/14/22	10/14/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**89.4**		%	1	BFJ0288	10/12/22	10/13/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.122**	0.0100	mmhos/cm	1	BFJ0304	10/12/22	10/14/22	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/06/22 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.63**		pH Units	1	BFJ0303	10/12/22	10/14/22	EPA 9045D	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:31

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0297 - General Preparation										
Blank (BFJ0297-BLK1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BFJ0297-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Calcium	5.24	0.0500	mg/L wet	5.00		105	70-130			
Magnesium	6.03	0.0500	"	5.00		121	70-130			
Sodium	5.79	0.0500	"	5.00		116	70-130			

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:31

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0288 - General Preparation										
Duplicate (BFJ0288-DUP1)	**Source: 2210104-01**			Prepared: 10/12/22 Analyzed: 10/13/22						
% Solids	80.6		%		80.9			0.338	20	

S2

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:31

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0304 - General Preparation										
Blank (BFJ0304-BLK1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
LCS (BFJ0304-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	0.152	0.0100	mmhos/cm	0.150		102	95-105			
Duplicate (BFJ0304-DUP1)	**Source: 2210110-01**			Prepared: 10/12/22 Analyzed: 10/14/22						
Specific Conductance (EC)	0.122	0.0100	mmhos/cm		0.122			0.0817	20	

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:31

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BFJ0303 - General Preparation										
LCS (BFJ0303-BS1)				Prepared: 10/12/22 Analyzed: 10/14/22						
pH	8.95		pH Units	9.18		97.5	95-105			
Duplicate (BFJ0303-DUP1)		**Source: 2210110-01**		Prepared: 10/12/22 Analyzed: 10/14/22						
pH	7.65		pH Units		7.63			0.262	20	

XTO on file on file ON FILE, 80401	Project: Apache Canyon 6-9V Project Number: XTO220314.0001 Project Manager: Chris McKisson	**Reported:** 10/14/22 16:31

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

ANALYTICAL REPORT

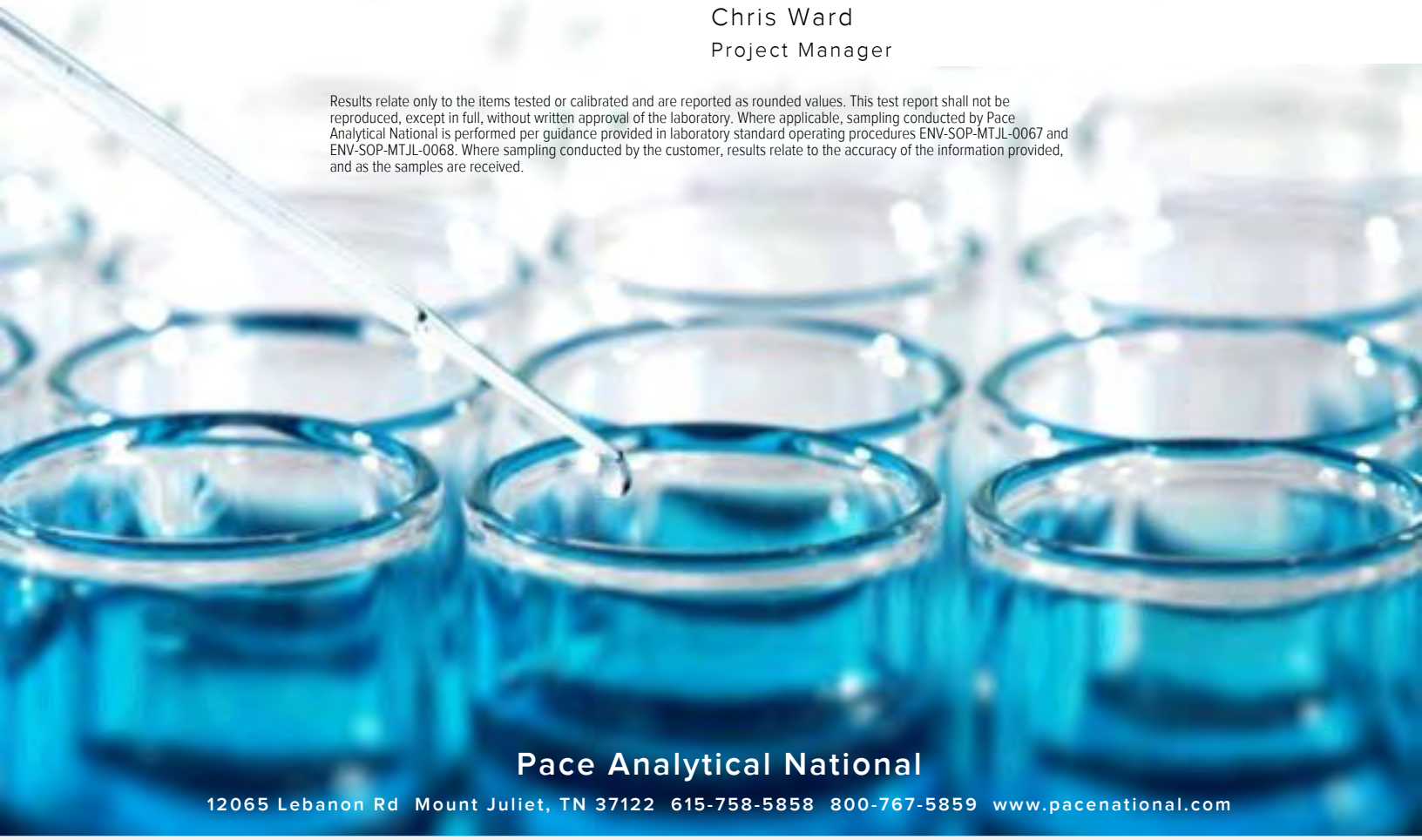
August 01, 2022

Confluence Compliance Companies - CO

Sample Delivery Group:	L1513831
Samples Received:	07/12/2022
Project Number:	
Description:	APACHE CANYON 6-9 / BACKGROUND
Site:	APACHE CANYON 6-9
Report To:	Chris McKisson 403 ½ Rockwood Lane Grand Junction, CO 81507

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SAMPLE SUMMARY

220707_APACHE_BG(1600)0.5' L1513831-01 Solid

Collected by: Tim Freeman
Collected date/time: 07/07/22 16:00
Received date/time: 07/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1898975	1	07/28/22 23:38	07/28/22 23:38	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1900162	1	07/27/22 09:46	07/29/22 15:43	ERP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1894996	1	07/14/22 13:00	07/14/22 15:00	GI	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1898491	1	07/21/22 04:05	07/22/22 05:03	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1895522	1	07/18/22 08:34	07/19/22 10:23	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1898978	1	07/27/22 11:11	07/29/22 13:36	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1895524	5	07/18/22 08:47	07/19/22 12:26	SJM	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	0.107		1	07/28/2022 23:38	WG1898975

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	07/29/2022 15:43	WG1900162

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.07	T8	1	07/14/2022 15:00	WG1894996

Sample Narrative:

L1513831-01 WG1894996: 7.07 at 24.2C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	147		10.0	1	07/22/2022 05:03	WG1898491

Sample Narrative:

L1513831-01 WG1898491: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	189		0.0852	0.500	1	07/19/2022 10:23	WG1895522
Cadmium	0.205	J	0.0471	0.500	1	07/19/2022 10:23	WG1895522
Copper	30.4		0.400	2.00	1	07/19/2022 10:23	WG1895522
Lead	12.5		0.208	0.500	1	07/19/2022 10:23	WG1895522
Nickel	15.2		0.132	2.00	1	07/19/2022 10:23	WG1895522
Selenium	U		0.764	2.00	1	07/19/2022 10:23	WG1895522
Silver	U		0.127	1.00	1	07/19/2022 10:23	WG1895522
Zinc	70.9		0.832	5.00	1	07/19/2022 10:23	WG1895522

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.378		0.0167	0.200	1	07/29/2022 13:36	WG1898978

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.36		0.100	1.00	5	07/19/2022 12:26	WG1895524

Method Blank (MB)

(MB) R3821027-1 07/29/22 14:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1511845-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1511845-02 07/29/22 14:30 • (DUP) R3821027-3 07/29/22 14:36

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.427	0.489	1	13.6	J	20

L1513835-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513835-01 07/29/22 15:48 • (DUP) R3821027-4 07/29/22 15:54

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3821027-2 07/29/22 14:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.5	105	80.0-120	

L1513861-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513861-01 07/29/22 16:35 • (MS) R3821027-8 07/29/22 16:45 • (MSD) R3821027-9 07/29/22 16:51

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 %
Hexavalent Chromium	20.0	U	14.1	7.68	70.6	38.4	1	75.0-125	J6	J3 J6	59.2	20

L1513861-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1513861-01 07/29/22 16:35 • (MS) R3821027-10 07/29/22 16:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	661	U	517	78.2	50	75.0-125	

L1510265-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1510265-10 07/14/22 15:00 • (DUP) R3814923-2 07/14/22 15:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.86	7.83	1	0.382		1

Sample Narrative:

OS: 7.86 at 23.8C

DUP: 7.83 at 23.2C

L1513835-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513835-01 07/14/22 15:00 • (DUP) R3814923-3 07/14/22 15:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.12	7.11	1	0.141		1

Sample Narrative:

OS: 7.12 at 23.8C

DUP: 7.11 at 23.8C

Laboratory Control Sample (LCS)

(LCS) R3814923-1 07/14/22 15:00

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

Sample Narrative:

LCS: 9.9 at 23C

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

Method Blank (MB)

(MB) R3817975-1 07/22/22 05:03

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:
BLANK: at 25C

L1513811-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513811-01 07/22/22 05:03 • (DUP) R3817975-3 07/22/22 05:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1270	1380	1	7.63		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1513813-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1513813-02 07/22/22 05:03 • (DUP) R3817975-4 07/22/22 05:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	126	148	1	16.3		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3817975-2 07/22/22 05:03

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	286	279	97.4	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3816688-1 07/19/22 09:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3816688-2 07/19/22 09:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	94.3	94.3	80.0-120	
Cadmium	100	90.9	90.9	80.0-120	
Copper	100	91.8	91.8	80.0-120	
Lead	100	91.2	91.2	80.0-120	
Nickel	100	91.0	91.0	80.0-120	
Selenium	100	91.4	91.4	80.0-120	
Silver	20.0	17.7	88.7	80.0-120	
Zinc	100	90.1	90.1	80.0-120	

L1513850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513850-01 07/19/22 09:56 • (MS) R3816688-5 07/19/22 10:04 • (MSD) R3816688-6 07/19/22 10:07

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 %
Barium	100	192	296	289	104	96.6	1	75.0-125			2.48	20
Cadmium	100	0.306	93.6	87.7	93.3	87.4	1	75.0-125			6.45	20
Copper	100	33.1	131	123	97.9	89.9	1	75.0-125			6.32	20
Lead	100	13.5	103	98.2	89.4	84.8	1	75.0-125			4.59	20
Nickel	100	15.2	109	102	93.6	86.4	1	75.0-125			6.89	20
Selenium	100	U	92.1	87.3	92.1	87.3	1	75.0-125			5.38	20
Silver	20.0	U	18.2	17.1	91.1	85.4	1	75.0-125			6.47	20
Zinc	100	72.1	174	156	102	83.5	1	75.0-125			11.2	20

Method Blank (MB)

(MB) R3820746-1 07/29/22 12:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

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

(LCS) R3820746-2 07/29/22 12:34 • (LCSD) R3820746-3 07/29/22 12:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	0.951	0.929	95.1	92.9	80.0-120			2.35	20

Method Blank (MB)

(MB) R3816660-1 07/19/22 11:45

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) R3816660-2 07/19/22 11:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	91.1	91.1	80.0-120	

L1513850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513850-01 07/19/22 11:52 • (MS) R3816660-5 07/19/22 12:02 • (MSD) R3816660-6 07/19/22 12:05

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	2.69	86.0	86.2	83.3	83.5	5	75.0-125			0.254	20

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.
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
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.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
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

Pace Analytical™

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

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

Company: Confluence Compliance Companies	Billing Information: Info on file
Address: Info on file	
Report To: Chris McKisson (chris.mckisson@confluence-cc.com)	Email To: Info on file
Copy To: remediation@confluence-cc.com	Site Collection Info/Address:
Customer Project Name/Number: Apache Canyon 6-9 / Background	State: / County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: Email:	Site/Facility ID #: Apache Canyon 6-9V; Compliance Monitoring? [ ] Yes [X] No
Collected By (print): Tim Freeman	Purchase Order # : Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Immediately Packed on Ice: [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: _____

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 _____

* 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Analyses: EC, SAR, pH	Analyses: Boron (hot water soluble)	Analyses: Table 915-1 Metals
220707_Apache_BG(1600)0.5'	SL	Grab	7/7/2022	16:00				1	P	x	x	x

H104

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:

L1513821-01

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

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 5829 6696 5060

Samples received via: (FEDEX) UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y (N) NA
Therm ID#: JAA6
Cooler 1 Temp Upon Receipt: 0.2 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 0.2 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	7/11/22 0830	UPS & CH	7/11/22 0830
Relinquished by/Company: (Signature) UPS & CH	7/11/22 0830	Fedex	
Relinquished by/Company: (Signature)		Zac Porzio	7-12-22 09:00

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: ____

ANALYTICAL REPORT

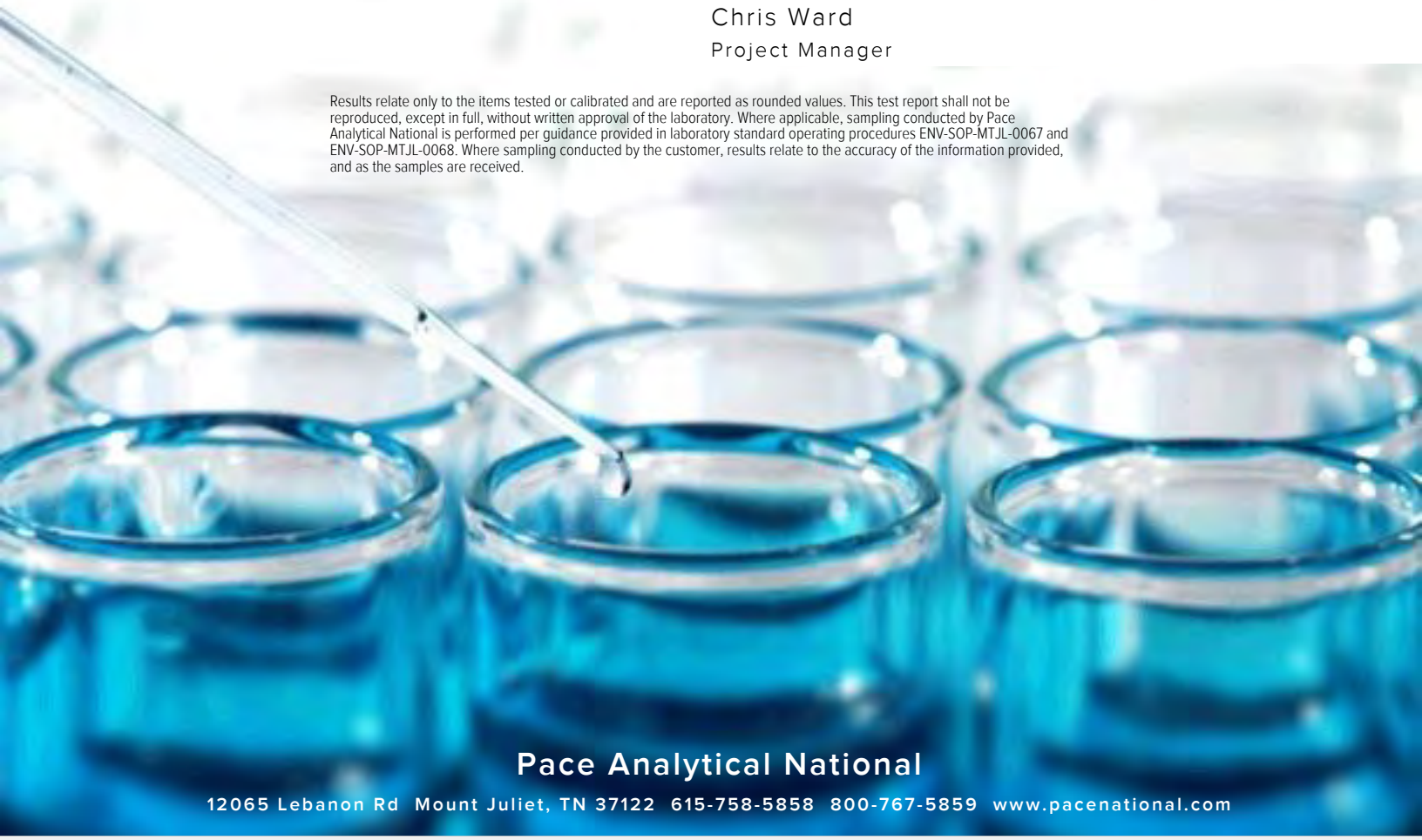
August 01, 2022

Confluence Compliance Companies - CO

Sample Delivery Group:	L1513835
Samples Received:	07/12/2022
Project Number:	
Description:	APACHE CANYON 6-9 / BACKGROUND
Site:	APACHE CANYON 6-9
Report To:	Chris McKisson 403 ½ Rockwood Lane Grand Junction, CO 81507

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SAMPLE SUMMARY

220707_APACHE_BG(1540)0.5' L1513835-01 Solid

Collected by: Tim Freeman
Collected date/time: 07/07/22 15:40
Received date/time: 07/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1898975	1	07/28/22 23:40	07/28/22 23:40	CCE	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1900162	1	07/27/22 09:46	07/29/22 15:48	ERP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1894996	1	07/14/22 13:00	07/14/22 15:00	GI	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1898491	1	07/21/22 04:05	07/22/22 05:03	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1895522	1	07/18/22 08:34	07/19/22 10:26	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1898978	1	07/27/22 11:11	07/29/22 13:39	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1895524	5	07/18/22 08:47	07/19/22 12:29	SJM	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	0.0484		1	07/28/2022 23:40	WG1898975

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	07/29/2022 15:48	WG1900162

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.12	T8	1	07/14/2022 15:00	WG1894996

Sample Narrative:

L1513835-01 WG1894996: 7.12 at 23.8C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	98.9		10.0	1	07/22/2022 05:03	WG1898491

Sample Narrative:

L1513835-01 WG1898491: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	179		0.0852	0.500	1	07/19/2022 10:26	WG1895522
Cadmium	0.240	J	0.0471	0.500	1	07/19/2022 10:26	WG1895522
Copper	31.1		0.400	2.00	1	07/19/2022 10:26	WG1895522
Lead	13.3		0.208	0.500	1	07/19/2022 10:26	WG1895522
Nickel	15.8		0.132	2.00	1	07/19/2022 10:26	WG1895522
Selenium	U		0.764	2.00	1	07/19/2022 10:26	WG1895522
Silver	U		0.127	1.00	1	07/19/2022 10:26	WG1895522
Zinc	74.2		0.832	5.00	1	07/19/2022 10:26	WG1895522

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.318		0.0167	0.200	1	07/29/2022 13:39	WG1898978

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.31		0.100	1.00	5	07/19/2022 12:29	WG1895524

Method Blank (MB)

(MB) R3821027-1 07/29/22 14:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1511845-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1511845-02 07/29/22 14:30 • (DUP) R3821027-3 07/29/22 14:36

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.427	0.489	1	13.6	J	20

L1513835-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513835-01 07/29/22 15:48 • (DUP) R3821027-4 07/29/22 15:54

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3821027-2 07/29/22 14:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.5	105	80.0-120	

L1513861-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513861-01 07/29/22 16:35 • (MS) R3821027-8 07/29/22 16:45 • (MSD) R3821027-9 07/29/22 16:51

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 %
Hexavalent Chromium	20.0	U	14.1	7.68	70.6	38.4	1	75.0-125	J6	J3 J6	59.2	20

L1513861-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1513861-01 07/29/22 16:35 • (MS) R3821027-10 07/29/22 16:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	661	U	517	78.2	50	75.0-125	

L1510265-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1510265-10 07/14/22 15:00 • (DUP) R3814923-2 07/14/22 15:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.86	7.83	1	0.382		1

Sample Narrative:

OS: 7.86 at 23.8C

DUP: 7.83 at 23.2C

L1513835-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513835-01 07/14/22 15:00 • (DUP) R3814923-3 07/14/22 15:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.12	7.11	1	0.141		1

Sample Narrative:

OS: 7.12 at 23.8C

DUP: 7.11 at 23.8C

Laboratory Control Sample (LCS)

(LCS) R3814923-1 07/14/22 15:00

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

Sample Narrative:

LCS: 9.9 at 23C

Method Blank (MB)

(MB) R3817975-1 07/22/22 05:03

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:
BLANK: at 25C

L1513811-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513811-01 07/22/22 05:03 • (DUP) R3817975-3 07/22/22 05:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1270	1380	1	7.63		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1513813-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1513813-02 07/22/22 05:03 • (DUP) R3817975-4 07/22/22 05:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	126	148	1	16.3		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3817975-2 07/22/22 05:03

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	286	279	97.4	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3816688-1 07/19/22 09:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3816688-2 07/19/22 09:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	94.3	94.3	80.0-120	
Cadmium	100	90.9	90.9	80.0-120	
Copper	100	91.8	91.8	80.0-120	
Lead	100	91.2	91.2	80.0-120	
Nickel	100	91.0	91.0	80.0-120	
Selenium	100	91.4	91.4	80.0-120	
Silver	20.0	17.7	88.7	80.0-120	
Zinc	100	90.1	90.1	80.0-120	

L1513850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513850-01 07/19/22 09:56 • (MS) R3816688-5 07/19/22 10:04 • (MSD) R3816688-6 07/19/22 10:07

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 %
Barium	100	192	296	289	104	96.6	1	75.0-125			2.48	20
Cadmium	100	0.306	93.6	87.7	93.3	87.4	1	75.0-125			6.45	20
Copper	100	33.1	131	123	97.9	89.9	1	75.0-125			6.32	20
Lead	100	13.5	103	98.2	89.4	84.8	1	75.0-125			4.59	20
Nickel	100	15.2	109	102	93.6	86.4	1	75.0-125			6.89	20
Selenium	100	U	92.1	87.3	92.1	87.3	1	75.0-125			5.38	20
Silver	20.0	U	18.2	17.1	91.1	85.4	1	75.0-125			6.47	20
Zinc	100	72.1	174	156	102	83.5	1	75.0-125			11.2	20

Method Blank (MB)

(MB) R3820746-1 07/29/22 12:31

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

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

(LCS) R3820746-2 07/29/22 12:34 • (LCSD) R3820746-3 07/29/22 12:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	0.951	0.929	95.1	92.9	80.0-120			2.35	20

Method Blank (MB)

(MB) R3816660-1 07/19/22 11:45

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) R3816660-2 07/19/22 11:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	91.1	91.1	80.0-120	

L1513850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513850-01 07/19/22 11:52 • (MS) R3816660-5 07/19/22 12:02 • (MSD) R3816660-6 07/19/22 12:05

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	2.69	86.0	86.2	83.3	83.5	5	75.0-125			0.254	20

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.
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
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.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

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

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

Company: Confluence Compliance Companies	Billing Information: Info on file
Address: Info on file	
Report To: Chris McKisson (chris.mckisson@confluence-cc.com)	Email To: Info on file
Copy To: remediation@confluence-cc.com	Site Collection Info/Address:
Customer Project Name/Number: Apache Canyon 6-9 / Background	State: / County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET

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 _____

Phone: Email:	Site/Facility ID #: Apache Canyon 6-9V	Compliance Monitoring? [ ] Yes [X] No
Collected By (print): Tim Freeman	Purchase Order # : Quote #:	DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required:	Immediately Packed on Ice: [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)

Analyses

H103

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	EC, SAR, pH	Boron (hot water soluble)	Table 915-1 Metals
220707_Apache_BG(1540)0.5'	SL	Grab	7/7/2022	15:40				1	P	x	x	x

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:

L1573935-01

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

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 5829 6696 5060

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: IAA6
Cooler 1 Temp Upon Receipt: 0.2 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 0.2 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	7/11/22 0830		7/11/22 0830
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	7/11/22 0830		
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
			7-12-22 0900

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: ____

ANALYTICAL REPORT

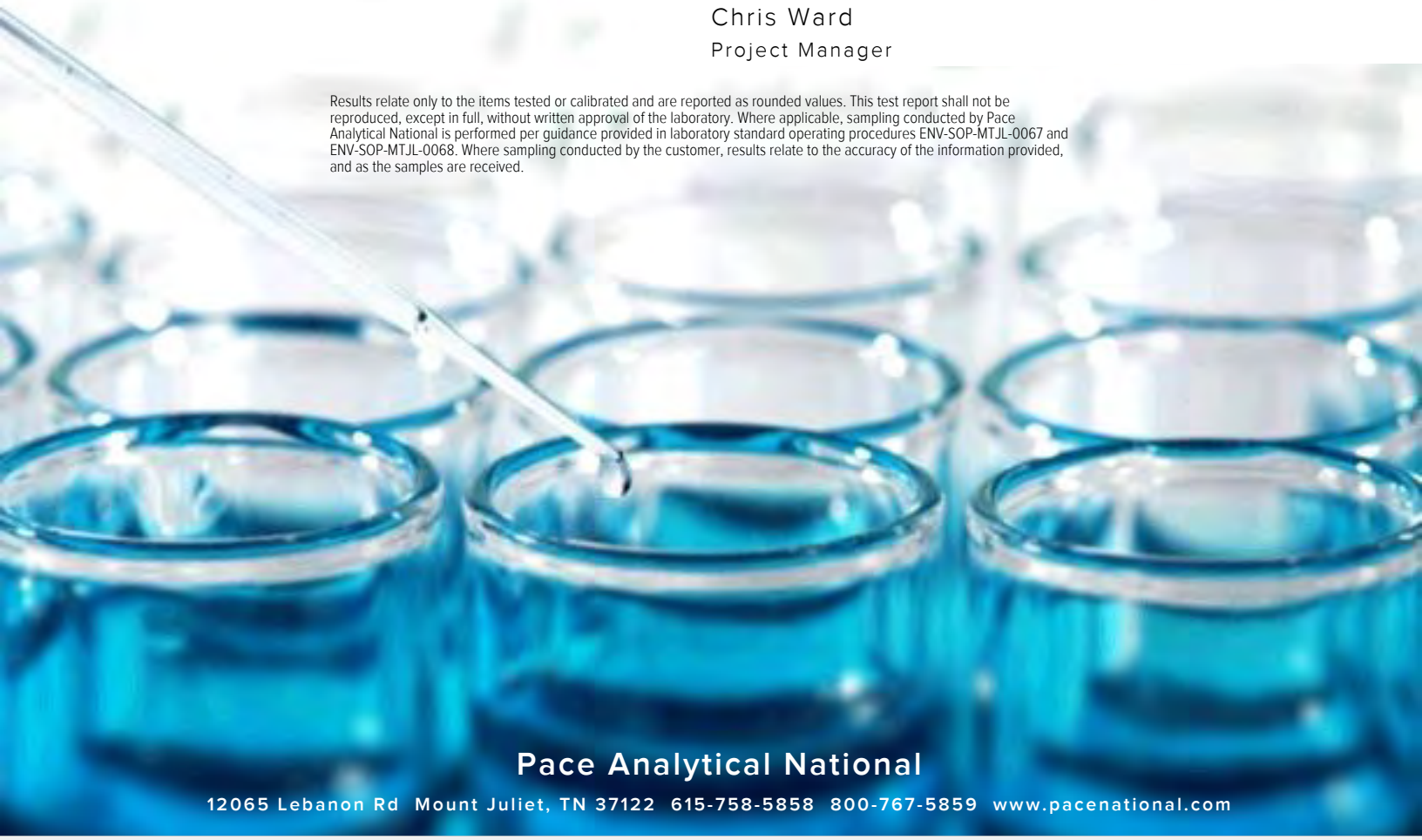
August 01, 2022

Confluence Compliance Companies - CO

Sample Delivery Group:	L1513838
Samples Received:	07/12/2022
Project Number:	
Description:	Apace Cayon 6-9
Site:	APACHE CANYON 6-9
Report To:	Chris McKisson 403 ½ Rockwood Lane Grand Junction, CO 81507

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SAMPLE SUMMARY

220707_APACHE_BG(1515)0.5' L1513838-01 Solid

Collected by: Tim Freeman
Collected date/time: 07/07/22 15:15
Received date/time: 07/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1898989	1	07/26/22 13:51	07/26/22 13:51	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1900162	1	07/27/22 09:46	07/29/22 16:04	ERP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1894996	1	07/14/22 13:00	07/14/22 15:00	GI	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1898491	1	07/21/22 04:05	07/22/22 05:03	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1895522	1	07/18/22 08:34	07/19/22 10:31	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1902587	1	07/28/22 19:56	07/29/22 11:18	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1895524	5	07/18/22 08:47	07/19/22 12:36	SJM	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	0.0531		1	07/26/2022 13:51	WG1898989

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	07/29/2022 16:04	WG1900162

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.09	T8	1	07/14/2022 15:00	WG1894996

Sample Narrative:

L1513838-01 WG1894996: 7.09 at 23.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	80.6		10.0	1	07/22/2022 05:03	WG1898491

Sample Narrative:

L1513838-01 WG1898491: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	190		0.0852	0.500	1	07/19/2022 10:31	WG1895522
Cadmium	0.221	J	0.0471	0.500	1	07/19/2022 10:31	WG1895522
Copper	30.9		0.400	2.00	1	07/19/2022 10:31	WG1895522
Lead	13.2		0.208	0.500	1	07/19/2022 10:31	WG1895522
Nickel	13.6		0.132	2.00	1	07/19/2022 10:31	WG1895522
Selenium	U		0.764	2.00	1	07/19/2022 10:31	WG1895522
Silver	U		0.127	1.00	1	07/19/2022 10:31	WG1895522
Zinc	66.8		0.832	5.00	1	07/19/2022 10:31	WG1895522

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.235		0.0167	0.200	1	07/29/2022 11:18	WG1902587

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.55		0.100	1.00	5	07/19/2022 12:36	WG1895524

Method Blank (MB)

(MB) R3821027-1 07/29/22 14:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1511845-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1511845-02 07/29/22 14:30 • (DUP) R3821027-3 07/29/22 14:36

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.427	0.489	1	13.6	J	20

L1513835-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513835-01 07/29/22 15:48 • (DUP) R3821027-4 07/29/22 15:54

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3821027-2 07/29/22 14:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.5	105	80.0-120	

L1513861-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513861-01 07/29/22 16:35 • (MS) R3821027-8 07/29/22 16:45 • (MSD) R3821027-9 07/29/22 16:51

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 %
Hexavalent Chromium	20.0	U	14.1	7.68	70.6	38.4	1	75.0-125	J6	J3 J6	59.2	20

L1513861-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1513861-01 07/29/22 16:35 • (MS) R3821027-10 07/29/22 16:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	661	U	517	78.2	50	75.0-125	

L1510265-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1510265-10 07/14/22 15:00 • (DUP) R3814923-2 07/14/22 15:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.86	7.83	1	0.382		1

Sample Narrative:

OS: 7.86 at 23.8C

DUP: 7.83 at 23.2C

L1513835-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513835-01 07/14/22 15:00 • (DUP) R3814923-3 07/14/22 15:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.12	7.11	1	0.141		1

Sample Narrative:

OS: 7.12 at 23.8C

DUP: 7.11 at 23.8C

Laboratory Control Sample (LCS)

(LCS) R3814923-1 07/14/22 15:00

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

Sample Narrative:

LCS: 9.9 at 23C

Method Blank (MB)

(MB) R3817975-1 07/22/22 05:03

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:
BLANK: at 25C

L1513811-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513811-01 07/22/22 05:03 • (DUP) R3817975-3 07/22/22 05:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1270	1380	1	7.63		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1513813-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1513813-02 07/22/22 05:03 • (DUP) R3817975-4 07/22/22 05:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	126	148	1	16.3		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3817975-2 07/22/22 05:03

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	286	279	97.4	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3816688-1 07/19/22 09:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3816688-2 07/19/22 09:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	94.3	94.3	80.0-120	
Cadmium	100	90.9	90.9	80.0-120	
Copper	100	91.8	91.8	80.0-120	
Lead	100	91.2	91.2	80.0-120	
Nickel	100	91.0	91.0	80.0-120	
Selenium	100	91.4	91.4	80.0-120	
Silver	20.0	17.7	88.7	80.0-120	
Zinc	100	90.1	90.1	80.0-120	

L1513850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513850-01 07/19/22 09:56 • (MS) R3816688-5 07/19/22 10:04 • (MSD) R3816688-6 07/19/22 10:07

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 %
Barium	100	192	296	289	104	96.6	1	75.0-125			2.48	20
Cadmium	100	0.306	93.6	87.7	93.3	87.4	1	75.0-125			6.45	20
Copper	100	33.1	131	123	97.9	89.9	1	75.0-125			6.32	20
Lead	100	13.5	103	98.2	89.4	84.8	1	75.0-125			4.59	20
Nickel	100	15.2	109	102	93.6	86.4	1	75.0-125			6.89	20
Selenium	100	U	92.1	87.3	92.1	87.3	1	75.0-125			5.38	20
Silver	20.0	U	18.2	17.1	91.1	85.4	1	75.0-125			6.47	20
Zinc	100	72.1	174	156	102	83.5	1	75.0-125			11.2	20

Method Blank (MB)

(MB) R3820745-1 07/29/22 11:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

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

(LCS) R3820745-2 07/29/22 11:13 • (LCSD) R3820745-3 07/29/22 11:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	0.959	0.963	95.9	96.3	80.0-120			0.401	20

Method Blank (MB)

(MB) R3816660-1 07/19/22 11:45

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) R3816660-2 07/19/22 11:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	91.1	91.1	80.0-120	

L1513850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513850-01 07/19/22 11:52 • (MS) R3816660-5 07/19/22 12:02 • (MSD) R3816660-6 07/19/22 12:05

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	2.69	86.0	86.2	83.3	83.5	5	75.0-125			0.254	20

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.
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
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.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
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

Pace Analytical

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

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

Company: Confluence Compliance Companies	Billing Information: Info on file
Address: Info on file	
Report To: Chris McKisson (chris.mckisson@confluence-cc.com)	Email To: Info on file
Copy To: remediation@confluence-cc.com	Site Collection Info/Address:
Customer Project Name/Number: Apache Canyon 6-9 / Background	State: / County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: Email:	Site/Facility ID #: Apache Canyon 6-9V; Compliance Monitoring? [ ] Yes [X] No
Collected By (print): Tim Freeman	Purchase Order # : Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Immediately Packed on Ice: [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: _____

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 _____

* 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	EC, SAR, pH	Boron (hot water soluble)	Table 915-1 Metals	Analyses	Lab Profile/Line:
220707_Apache_BG(1515)0.5'	SL	Grab	7/7/2022	15:15				1	P	x	x	x		L1513838-01

H099

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:

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

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 5829 6696 5060

Samples received via: (FEDEX) UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y (N) NA
Therm ID#: JAH6
Cooler 1 Temp Upon Receipt: 0.2 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 0.2 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 7/11/22 0830	Received by/Company: (Signature)	Date/Time: 7/11/22 0830	MTJL LAB USE ONLY
Relinquished by/Company: (Signature)	Date/Time: 7/11/22 0830	Received by/Company: (Signature)	Date/Time:	Table #:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 7-12-22 09:00	Acctnum: Template: Prelogin: PM: PB:

Trip Blank Received: Y (N) NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

ANALYTICAL REPORT

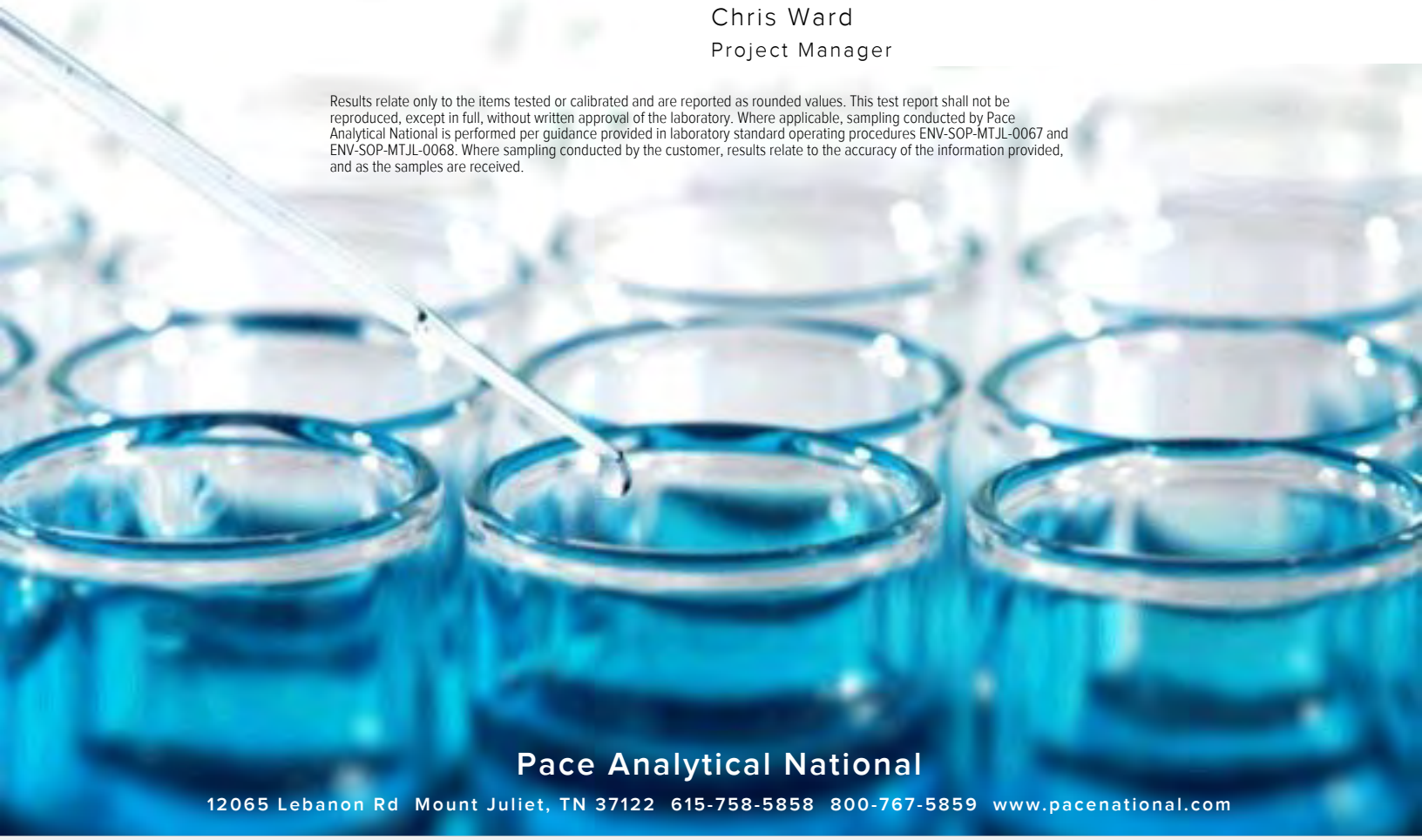
August 01, 2022

Confluence Compliance Companies - CO

Sample Delivery Group:	L1513850
Samples Received:	07/12/2022
Project Number:	
Description:	Apace Cayon 6-9
Site:	APACHE CANYON 6-9
Report To:	Chris McKisson 403 ½ Rockwood Lane Grand Junction, CO 81507

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

SAMPLE SUMMARY

220707_APACHE_BG(1610)0.5' L1513850-01 Solid

Collected by: Tim Freeman
Collected date/time: 07/07/22 16:10
Received date/time: 07/12/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1898989	1	07/26/22 13:54	07/26/22 13:54	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1900162	1	07/27/22 09:46	07/29/22 16:19	ERP	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1894996	1	07/14/22 13:00	07/14/22 15:00	GI	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1898491	1	07/21/22 04:05	07/22/22 05:03	ARD	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1895522	1	07/18/22 08:34	07/19/22 09:56	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1902587	1	07/28/22 19:56	07/29/22 11:21	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1895524	5	07/18/22 08:47	07/19/22 11:52	SJM	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	0.0783		1	07/26/2022 13:54	WG1898989

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	07/29/2022 16:19	WG1900162

Wet Chemistry by Method 9045D

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.55	T8	1	07/14/2022 15:00	WG1894996

Sample Narrative:

L1513850-01 WG1894996: 7.55 at 23.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	266		10.0	1	07/22/2022 05:03	WG1898491

Sample Narrative:

L1513850-01 WG1898491: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	192	O1	0.0852	0.500	1	07/19/2022 09:56	WG1895522
Cadmium	0.306	J	0.0471	0.500	1	07/19/2022 09:56	WG1895522
Copper	33.1		0.400	2.00	1	07/19/2022 09:56	WG1895522
Lead	13.5	O1	0.208	0.500	1	07/19/2022 09:56	WG1895522
Nickel	15.2		0.132	2.00	1	07/19/2022 09:56	WG1895522
Selenium	U		0.764	2.00	1	07/19/2022 09:56	WG1895522
Silver	U		0.127	1.00	1	07/19/2022 09:56	WG1895522
Zinc	72.1		0.832	5.00	1	07/19/2022 09:56	WG1895522

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.347		0.0167	0.200	1	07/29/2022 11:21	WG1902587

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.69		0.100	1.00	5	07/19/2022 11:52	WG1895524

Method Blank (MB)

(MB) R3821027-1 07/29/22 14:12

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Hexavalent Chromium	U		0.255	1.00

L1511845-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1511845-02 07/29/22 14:30 • (DUP) R3821027-3 07/29/22 14:36

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	0.427	0.489	1	13.6	J	20

L1513835-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513835-01 07/29/22 15:48 • (DUP) R3821027-4 07/29/22 15:54

Analyte	Original Result mg/kg	DUP Result mg/kg	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3821027-2 07/29/22 14:20

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.5	105	80.0-120	

L1513861-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513861-01 07/29/22 16:35 • (MS) R3821027-8 07/29/22 16:45 • (MSD) R3821027-9 07/29/22 16:51

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 %
Hexavalent Chromium	20.0	U	14.1	7.68	70.6	38.4	1	75.0-125	J6	J3 J6	59.2	20

L1513861-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1513861-01 07/29/22 16:35 • (MS) R3821027-10 07/29/22 16:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	661	U	517	78.2	50	75.0-125	

L1510265-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1510265-10 07/14/22 15:00 • (DUP) R3814923-2 07/14/22 15:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.86	7.83	1	0.382		1

Sample Narrative:

OS: 7.86 at 23.8C

DUP: 7.83 at 23.2C

L1513835-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513835-01 07/14/22 15:00 • (DUP) R3814923-3 07/14/22 15:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.12	7.11	1	0.141		1

Sample Narrative:

OS: 7.12 at 23.8C

DUP: 7.11 at 23.8C

Laboratory Control Sample (LCS)

(LCS) R3814923-1 07/14/22 15:00

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

Sample Narrative:

LCS: 9.9 at 23C

Method Blank (MB)

(MB) R3817975-1 07/22/22 05:03

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:
BLANK: at 25C

L1513811-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1513811-01 07/22/22 05:03 • (DUP) R3817975-3 07/22/22 05:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1270	1380	1	7.63		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1513813-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1513813-02 07/22/22 05:03 • (DUP) R3817975-4 07/22/22 05:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	126	148	1	16.3		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3817975-2 07/22/22 05:03

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	286	279	97.4	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3816688-1 07/19/22 09:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R3816688-2 07/19/22 09:54

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	94.3	94.3	80.0-120	
Cadmium	100	90.9	90.9	80.0-120	
Copper	100	91.8	91.8	80.0-120	
Lead	100	91.2	91.2	80.0-120	
Nickel	100	91.0	91.0	80.0-120	
Selenium	100	91.4	91.4	80.0-120	
Silver	20.0	17.7	88.7	80.0-120	
Zinc	100	90.1	90.1	80.0-120	

L1513850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513850-01 07/19/22 09:56 • (MS) R3816688-5 07/19/22 10:04 • (MSD) R3816688-6 07/19/22 10:07

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 %
Barium	100	192	296	289	104	96.6	1	75.0-125			2.48	20
Cadmium	100	0.306	93.6	87.7	93.3	87.4	1	75.0-125			6.45	20
Copper	100	33.1	131	123	97.9	89.9	1	75.0-125			6.32	20
Lead	100	13.5	103	98.2	89.4	84.8	1	75.0-125			4.59	20
Nickel	100	15.2	109	102	93.6	86.4	1	75.0-125			6.89	20
Selenium	100	U	92.1	87.3	92.1	87.3	1	75.0-125			5.38	20
Silver	20.0	U	18.2	17.1	91.1	85.4	1	75.0-125			6.47	20
Zinc	100	72.1	174	156	102	83.5	1	75.0-125			11.2	20

Method Blank (MB)

(MB) R3820745-1 07/29/22 11:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

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

(LCS) R3820745-2 07/29/22 11:13 • (LCSD) R3820745-3 07/29/22 11:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hot Water Sol. Boron	1.00	0.959	0.963	95.9	96.3	80.0-120			0.401	20

Method Blank (MB)

(MB) R3816660-1 07/19/22 11:45

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) R3816660-2 07/19/22 11:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	91.1	91.1	80.0-120	

L1513850-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1513850-01 07/19/22 11:52 • (MS) R3816660-5 07/19/22 12:02 • (MSD) R3816660-6 07/19/22 12:05

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	2.69	86.0	86.2	83.3	83.5	5	75.0-125			0.254	20

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.
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
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.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
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

Pace Analytical

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

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

Company: Confluence Compliance Companies	Billing Information: Info on file
Address: Info on file	
Report To: Chris McKisson (chris.mckisson@confluence-cc.com)	Email To: Info on file
Copy To: remediation@confluence-cc.com	Site Collection Info/Address:
Customer Project Name/Number: Apache Canyon 6-9 / Background	State: / County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: Email:	Site/Facility ID #: Apache Canyon 6-9 V
Collected By (print): Tim Freeman	Purchase Order # : Quote #:
Collected By (signature):	Turnaround Date Required:
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day

Compliance Monitoring? [ ] Yes [X] No

DW PWS ID #: DW Location Code:

Immediately Packed on Ice: [x] Yes [ ] No

Field Filtered (If applicable): [ ] Yes [ ] No

Analysis: _____

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 _____

* 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) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Analyses: EC, SAR, pH	Boron (hot water soluble)	Table 915-1 Metals	H106	Lab Profile/Line:
220707_Apache_BG(1610)0.5'	SL	Grab	7/7/2022	16:10				1	P	x	x	x		L1513850-01

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:

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

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 5829 6696 5060

Samples received via: (FEDEX) UPS Client Courier Pace Courier

LAB Sample Temperature Info:
Temp Blank Received: Y (N) NA
Therm ID#: JAH6
Cooler 1 Temp Upon Receipt: 0.2 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 0.2 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	7/11/22 0830		7/11/22 0830
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	7/11/22 0830		
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
		Zac Parra	7-12-22 09:00

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: ____