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EMPIRE ABO GAS PLANT (AP-112)
Soil Investigation Report and Remediation Plan
Eddy County, New Mexico

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1.0 INTRODUCTION

This document is prepared on behalf of AKA Energy Group LLC (AKA), as former operator of the Empire Abo Gas Plant (Site), for submittal to the New Mexico Oil Conservation Division (OCD) to report soil investigation results and proposed remedial actions at several operation areas at the Site. AKA is a wholly owned subsidiary of Southern Ute Indian Tribe Growth Fund (SUGF) and sold the Site to Durango Midstream LLC (Durango) on March 1, 2019, with AKA retaining liability for environmental conditions including polychlorinated biphenyls (PCBs) previously used in lubrication oil in the air compressors and instrument air east of the main compressor (Clark) building, groundwater contamination from light non-aqueous phase liquids and dissolved hydrocarbons and soil impacts at the following environmental assessment (EA) areas:

Wastewater Tanks (EA-02)	Amine Sump (EA-03)
Slop Oil Tanks (EA-05)	Cooling Tower (EA-07)
Lube Oil Tanks (EA-08)	PCB Area (EA-10)
Main Compressor (Clark) Building (EA-12)	Compressor (Engine 9) Building (EA-13)

The surface owner is Durango Midstream LLC. The Site is located approximately nine (9) miles southeast of Artesia, in Unit I (NE/4 SE/4) Section 3, Township 18 South and Range 27 East. The geodetic position is north 32° 46’ 37.4” and west 104° 15’ 32.7”. Figure 1 presents a topographic and location map. Figure 2 presents an aerial drawing showing the environmental assessment (EA) areas.

1.1 Physical Setting

The physical setting is as follows:

- The surface elevation is approximately 3,550 feet above mean sea level (msl).
- The topography slopes to the southeast.
- The nearest surface water feature is an unnamed drainage adjacent to the west side of the Site the flows south to Scoggins Draw about 1,300 feet south of the Site which discharges to Chalk Bluff Draw and to the Pecos River about 3.4 miles east-northeast of the Site.
- The principal soil type is “Reeves-Gypsum land complex, 0 to 3 percent slopes” consisting of about 8 inches of loam, 24 inches of clay loam, in descending order, and underlain by gypsum.
- The Tansill Formation (Permian) is the upper geological unit and is comprised of anhydrite, gypsum and salt about 100 feet thick.
- Groundwater occurs in the Tansill Formation between about 8 (MW-07) and 116 (MW-16) feet below ground surface (bgs).
- Mounding caused by naturally occurring perched water or historic leakage of water near the north central area of the Site causes groundwater to flow north, west, east and southeast.
- No fresh-water wells are located within 2 miles of the Site. According to TWDB the closest well is located about 500 feet south of the Site.

2.0 SOIL INVESTIGATION AND PROPOSED REMEDIATION

During July 2019, LAI was tasked with investigating each area for soil impacts. Soil samples were collected using a truck-mounted CME-75 hollow stem auger rig and spilt-spoon samplers operated by Enviro-Drill,

Inc. (Enviro-Drill) located in Albuquerque, New Mexico or Geoprobe Model DT-7822 track mounted direct push rig operated by LAI. Gypsum in the subsurface limited the use of direct push sampling method therefore soil samples were collected by Enviro-Drill under LAI supervision using the hollow stem augers and split-spoon samplers. Soil samples were collected in approximate 2.5-foot increments, depending on sample recovery, beginning at ground surface, 2.5, 7.5, 10 feet etc. to a maximum depth of about 25 feet bgs. The soil samples were submitted under preservation and chain of custody to DHL Analytical, Inc. (DHL) located in Round Rock, Texas. Appendix A presents the analytical laboratory reports. Appendix B presents boring logs. Appendix C presents photographs.

2.1 Wastewater Tank (EA-02)

The wastewater tank is located near the northwest corner of the Site and north of the former evaporation pond. The wastewater tank collected fluid (oil and produced water mixture) from the dehydration units, closed header tanks and inlet scrubbers while the plant was operating. Approximately of 3,000 barrels (bbl) of wastewater was generated each month and disposed off-site in an OCD permitted commercial saltwater disposal (SWD) well while the plant was operating. The wastewater tank is identified as area EA-02 on Figure 2.

On July 25, 2019, Enviro-Drill, Inc. (Enviro-Drill), under supervision from LAI, collected soil samples from three (3) borings (02-01, 02-02 and 02-03) to a maximum depth of about twelve (12) feet bgs (03). DHL analyzed the samples for chloride by EPA Method 300 and total petroleum hydrocarbons (TPH) including gasoline range organics (C6 to C12), diesel range organics (>C12 to C28) and oil range organics (>C28 to C35) by Criteria Working Group (CWG) Method 1005, equivalent to EPA SW-846 Method 8015, due to the shortened turnaround time and sample volume. Table 1 presents the laboratory analytical data summary. Figure 3a presents the soil sample location map. Appendix A presents the laboratory report.

The laboratory reported TPH below the OCD remediation limit of 100 mg/Kg presented in Table 1 (19.15.29 NMAC). Chloride was delineated vertically to 600 mg/Kg and exceeded the OCD cleanup limit of 600 mg/Kg in sample 02-03, 0 to 2 feet (787 mg/Kg).

Remediation Plan

AKA will excavate soil to two (2) feet bgs from an area measuring about 10 x 10 feet around location 02-03. The contaminated soil will be disposed at Lea Land Landfill. LAI personnel will collect confirmation soil samples from the bottom and sides of the excavation in accordance with OCD closure requirements in 19.15.29.12D(1) and analyze the samples for benzene, toluene, ethylbenzene, xylenes (BTEX), TPH and chloride by EPA Methods SW-846 8021B (BTEX) 8015 (TPH) and 300 (chloride). Additional soil will be excavated where benzene, BTEX, TPH or chloride exceed the OCD remediation limits of 10 mg/Kg (benzene), 50 mg/Kg (BTEX), 100 mg/Kg (TPH) and 600 mg/Kg (chloride). Additional soil will be removed where analytes exceed the OCD remediation limits. The excavation will be backfilled with non-waste containing material with chloride less than 600 mg/Kg. Figure 4a presents the proposed remediation area.

2.2 Amine Sump (EA-03)

The amine sump and tank are located near the west side of the Site and south of the former evaporation pond. The plant used monoethanolamine (MEA) to remove hydrogen sulfide and carbon dioxide gases from the gas stream. Amine was recycled back into the system and spent amine was transferred to an open drain sump and captured at the amine sump and tank. Approximately 200 bbl of spent amine and water were disposed off-site in an OCD permitted commercial SWD well per month while the plant was

operating. The amine sump is constructed of steel that sets inside a partially buried concrete containment. The amine sump identified as area EA-03 on Figure 2.

On July 25, 2019, Enviro-Drill collected soil samples from four (4) borings (03-01 through 03-04) on the north, east, south and west sides of the amine sump, respectively, to a maximum depth of about 10.25 feet bgs. DHL analyzed the upper samples (0 to 2 feet) for BTEX by EPA Method 8021B. All samples were analyzed for diethanolamine (DEA) and MEA by EPA Method 8015B and Method 1671, respectively, and TPH by CWG Method 1005, equivalent to EPA SW-846 Method 8015, due to the shortened turnaround time and sample volume. Table 1 presents the laboratory analytical data summary. Figure 3b presents the soil sample location map.

DEA and MEA were not reported above the laboratory analytical method reporting limits of 500 mg/Kg and 50 mg/Kg, respectively, and below the OCD recommended remediation limit of 500 mg/Kg. Benzene and BTEX were not reported above the OCD remediation limits of 10 mg/Kg and 50 mg/Kg, respectively. TPH was reported above the OCD remediation limit (2,500 mg/Kg) in the following soil samples:

03-01, 0 to 2 feet (2,796 mg/Kg)	03-02, 2.5 to 3 feet (7,950 mg/Kg)
03-03, 2.5 to 3.5 feet (6,316 mg/Kg)	03-04, 5 to 7 feet (6,230 mg/Kg)

Remediation Plan

Since the sump is no longer in service, AKA will remove the sump and piping from the containment for decontamination and recycle or disposal. Buried lines entering and exiting the sump will be purged and blinded. AKA will excavate soil from around the concrete containment to approximately 8 feet bgs. The concrete containment will be removed from the excavation and crushed for transport with the excavated soil to Lea Land Landfill located between Hobbs and Carlsbad, New Mexico. LAI personnel will collect confirmation soil samples from the bottom and sides of the excavation in accordance with OCD closure requirements in 19.15.29.12D(1) and analyze the samples for BTEX, TPH and chloride by EPA Methods SW-846 Methods 8021B (BTEX), 8015 (TPH) and Method 300 (chloride). Additional soil will be excavated where benzene, BTEX, TPH or chloride exceed the OCD remediation limits of 10 mg/Kg (benzene), 50 mg/Kg (BTEX), 100 mg/Kg (TPH) and 600 mg/Kg (chloride). The excavation will be backfilled with non-waste containing material with chloride less than 600 mg/Kg. Figure 4b presents the proposed remediation area.

2.3 Slop Oil Tanks (EA-05)

The slop oil tanks were located near the east central area of the Site and have been removed. The location consisted of two (2) steel tanks within earthen containment to capture oils off the compressor engines and drain system. The earthen berm is visible from satellite imagery. The plant generated approximately 400 bbls of oil waste per week which was removed from the tanks and trucked off site and disposed in OCD permitted SWD well. The slop oil tanks are identified as area EA-05 on Figure 2.

On July 24, 2019, Superior Hydrovac Solutions LLC (Superior) used a hydrovac to detect and expose underground pipelines at several locations inside and around the earthen containment. Enviro-Drill collected soil samples from five (5) borings (05-01 through 05-05) to a maximum depth of about 25.25 feet bgs. DHL analyzed the upper samples (0 to 1 foot) for BTEX by EPA Methods 8021B. All samples were analyzed for TPH by CWG Method 1005, equivalent to EPA SW-846 Method 8015, due to the shortened turnaround time and sample volume, and chloride by Method 300, respectively. Table 1 presents the laboratory analytical data summary. Figure 3c presents the soil sample location map.

Benzene and BTEX were not reported above the OCD remediation limits of 10 mg/Kg and 50 mg/Kg, respectively. TPH was reported above the OCD remediation limit (2,500 mg/Kg) in the following soil samples: 05-02, 0 to 1 foot (8,980 mg/Kg), 05-03, 1 to 1.5 feet (9,180 mg/Kg) and 2.5 to 2.75 feet (8,490 mg/Kg). Chloride was not reported above the OCD remediation limit of 10,000 mg/Kg but exceeds the OCD surface restoration limit (600 mg/Kg) per 19.15.29.13D(1) in sample 05-01, 0 to 1 foot (1,070 mg/Kg).

Remediation Plan

AKA will excavate soil with approval from the pipeline owner from the area approximately 10 x 10 feet around 05-01 and 05-02 to 1-foot bgs and 05-03 to 4 feet bgs. The contaminated soil will be disposed at Lea Land Landfill. LAI personnel will collect confirmation soil samples from the bottom and sides of the excavations in accordance with OCD closure requirements in 19.15.29.12D(1) and analyze the samples for BTEX, TPH and chloride by EPA Methods SW-846 8015B (DEA), 1671 (MEA), *8021B (BTEX), 8015 (TPH) and Method 300 (chloride). Additional soil will be excavated where benzene, BTEX, TPH or chloride exceed the OCD remediation limits of 10 mg/Kg (benzene), 50 mg/Kg (BTEX), 100 mg/Kg (TPH) and 600 mg/Kg (chloride). The excavation will be backfilled with non-waste containing material with chloride less than 600 mg/Kg. Figure 4c presents the proposed remediation areas.*

2.4 Cooling Tower (EA-07)

The cooling tower was located near the north-central area of the Site and was used for cooling engine jacket water and other equipment, as needed. Blow down (waste) from the cooling tower was directed to the former evaporation pond. Sulfuric acid was occasionally added to the cooling tower to control pH. The cooling tower is identified as area EA-07 on Figure 2.

A representative sample of water was collected from the cooling on May 29, 2009, while the plant was operating. The sample was analyzed for BTEX, dissolved (filtered) metals including arsenic, barium cadmium, chromium, lead, mercury, selenium and silver (RCRA 8), cations (calcium, magnesium, sodium, and potassium), anions (alkalinity, sulfate and chloride) and total dissolved solids (TDS). Benzene and chromium were reported at 0.00128 and 0.00282 milligrams per liter (mg/L), respectively, and below the New Mexico Water Quality Control Commission (WQCC) human health standards of 0.01 mg/L. The cooling tower was dismantled in 2017.

On July 26, 2019, Enviro-Drill collected soil samples from six (6) borings (07-01 through 07-06) to a maximum depth of about 7.75 feet bgs. DHL analyzed the samples for RCRA 8 metals (arsenic, barium cadmium, chromium, lead, mercury, selenium and silver) by EPA Method 6020A, Method 7471B (mercury) and Method 300 (chloride). Table 2 presents the laboratory analytical data summary. Figure 3d presents the soil sample location map.

Remediation Plan

AKA will excavate soil from the area approximately 5 x 10 feet around location 07-02 to approximately two (2) feet bgs to reduce the arsenic concentration (21.3 mg/Kg) below the New Mexico Environment Department (NMED) soil screening level (17.7 mg/Kg) and approximately 5 x 10 feet around location 07-05 to approximately eight (8) feet bgs to reduce the chromium concentration (427 mg/Kg) below the NMED soil screening level (340 mg/Kg). LAI personnel will collect confirmation soil samples from the bottom and sides of the 07-02 excavation in accordance with OCD closure requirements in 19.15.29.12D(1) and analyze the samples for total arsenic and the 07-05 excavation for total chromium. Additional soil will be excavated where total arsenic in excavation 07-02 and total chromium in excavation 07-05 exceeds the NMED soil screening limits of 17.7 mg/Kg and 340 mg/Kg, respectively. A 5-point composite soil sample

will be collected from each soil pile and analyzed for arsenic and chromium by toxicity characteristic leaching procedure (TCLP) in accordance with EPA SW-846 Method 1311 for hazardous characteristics. The soil will be disposed at Lea Land Landfill if considered non-hazardous by TCLP. The excavations will be backfilled with non-waste containing material with chloride less than 600 mg/Kg. Figure 4d presents the proposed remediation areas.

2.5 Lube Oil Tanks (EA-08)

The lube oil tanks were located west of the cooling towner near the north-central area of the Site where lubrication oil was stored in two (2) 400 bbl capacity steel tanks inside lined containment. The lube oil was used for lubricating engines, etc., and are identified as area EA-08 on Figure 2.

On July 25, 2019, Enviro-Drill collected soil samples from four (4) borings (08-01 through 08-04) on the west, north, east and south sides of the former tank containment to a maximum depth of about 11 feet bgs. DHL analyzed the samples for TPH by CWG Method 1005, equivalent to EPA SW-846 Method 8015, due to the shortened turnaround time. Table 1 presents the laboratory analytical data summary. Figure 3e presents the soil sample location map.

Remediation Plan

No remediation is planned for the Lube Oil Tanks (EA-08) due to TPH concentrations below the analytical method reporting limit in all samples.

2.6 PCB Area (EA-10)

The PCB Area (EA-10) is located east of the main compressor (Clark Building) where the air compressors for starting air system and instrument are was previously located. During the early history of the Site, polychlorinated biphenyls (PCBs) were used in previously used in lubrication oil in the air compressors and instrument air east of the main compressor (Clark) building and contaminated soil and equipment. In 2000, Atlantic Richfield Corporation (ARCO), the previous owner, contracted Philip Environmental Services (PE) to remediate PCBs in equipment and in soil from three (3) areas: Area 1 (air compressor building), Area 2 (volume bottle near compressor 2) and Area 3 (volume bottle near compressor 3). Area 3 was remediated for PCB below the EPA low-occupancy remediation level of 25 parts per million (ppm) pursuant to 40 CFR 761.61(a). ARCO, with EPA Region 6 approval, performed risk-based closure for Areas 1 and 2 by capping with a geosynthetic clay (bentonite) liner. Residual PCB concentrations in soil at certain locations beneath the liner exceed the EPA low-occupancy cleanup level. The PCB area is identified as area EA-10 on Figure 2.

On June 26 – 28, Enviro-Drill collected soil samples from twenty-seven (27) borings (10-01 through 10-27) to a maximum depth of about eleven (11) feet bgs. LAI personnel also collected concrete samples from the main compressor (Clark) building foundation which were analyzed for PCBs. Table 3 presents the PCB concrete and soil sample analytical data summary. Figure 3f presents the soil sample location map.

Remediation Plan

On February 4, 2020, EPA Region 6 approved the final PCB remediation plan that LAI prepared and submitted on January 23, 2020, on behalf of AKA, with the goal of remediating residual PCBs in soil to less than the EPA low occupancy cleanup level of 25ppm pursuant 40 CFR 761.61*. Figure 4e presents the proposed remediation areas. Appendix D presents the EPA approval.*

2.7 Main Compressor (Clark) Building (EA-12)

The main compressor (Clark) building (EA-12) was located near the east central area of the Site and south of the office. The building housed engines for compressing natural gas. Demolition of the main compressor (Clark) building, including engines, piping and concrete, occurred during the last quarter 2018 and first quarter 2019. The main compressor (Clark) building is identified as area EA-12 on Figure 2.

On October 14, 2019, Rocky Peak Services, Hobbs, New Mexico, under supervision from LAI, used a backhoe to collect soil samples at seventeen (17) locations. LAI personnel used a stainless-steel trowel to collect the samples from the backhoe bucket. The backhoe was used for collecting the samples due to consolidated gypsum (caliche) present at shallow depths beneath the building. Soil samples were collected to a maximum depth of seven (7) feet bgs at location C-12. The samples were analyzed for BTEX by Method 8021B, TPH by Method 8015D and PCBs by EPA SW-846 Method 8082. Table 4 presents the BTEX and TPH laboratory analytical data summary. Table 5 presents the total metals laboratory analytical data summary. Table 6 presents the PCB laboratory analytical data summary. Figure 3g presents the soil sample location map.

Benzene and BTEX were not reported above the OCD remediation limits of 10 mg/Kg and 50 mg/Kg, respectively. The laboratory reported TPH above the OCD remediation limit (2,500 mg/Kg) in the following soil samples:

C-2, 1.0 feet (3,070 mg/Kg
C-3, 1.0 feet (3,319 mg/Kg)
C-4, 1.0 feet (5,242.29 mg/Kg)
C-10, 0.5 feet (3,006 mg/Kg)
C-11, 0.5 feet (3,167 mg/Kg)
C-11, 1.0 feet (6,360 mg/Kg)
C-11, 2.0 feet (3,957.1 mg/Kg)
C-12, 0.5 feet (18,173 mg/Kg)
C-12, 1.0 feet (24,776.5 mg/Kg)
C-12, 3.0 feet (15,630 mg/Kg)
C-12, 5.0 feet (4,838 mg/Kg)
C-12, 7.0 feet (5,051 mg/Kg)
C-13, 0.5 feet (24,590 mg/Kg)
C-13, 1.0 mg/Kg (17,470 mg/Kg)
C-14, 0.5 mg/Kg (3,429.6 mg/Kg)
C-15, 0.5 feet (4,428.8 mg/Kg)
C-15, 2.0 feet (14,650 mg/Kg)
C-15, 3.0 feet (13,200 mg/Kg)
C-16, 0.5 feet (3,660 mg/Kg)

PCBs were not reported above the EPA low-occupancy remediation level of 25 ppm pursuant to 40 CFR 761.61(a).

Remediation Plan

AKA will excavate soil at the above locations to achieve the OCD's cleanup limit of 2,500 mg/Kg for TPH. The contaminated soil will be disposed at Lea Land Landfill. LAI personnel will collect confirmation soil samples from the bottom and sides of the excavations in accordance with OCD closure requirements in 19.15.29.12D(1) and analyze the samples for BTEX, TPH and chloride by EPA Methods SW-846 8021B, 8015D and 300, respectively. *Additional soil will be excavated where benzene, BTEX, TPH or chloride*

exceed the OCD remediation limits of 10 mg/Kg (benzene), 50 mg/Kg (BTEX), 2,500 mg/Kg (TPH) and 10,000 mg/Kg (chloride). The excavation will be backfilled with non-waste containing material with chloride less than 600 mg/Kg. Figure 4f presents the proposed remediation areas.

2.8 Compressor (Engine 9) Building (EA-13)

The compressor (Engine 9) building (EA-13) was located southwest of the main compressor (Clark) building and housed an engine for compressing natural gas. Demolition of the compressor (Engine 9) building, including the engine, piping and concrete, occurred during the last quarter 2018 and first quarter 2019. The compressor (Engine 9) building is identified as area EA-13 on Figure 2.

On June 12, 2019, LAI personnel collected a soil sample (Eng 9) near the center of the former building foundation at approximately three (3) feet bgs. A stainless-steel trowel was used to collect the sample. The sample was analyzed for BTEX by Method 8260, TPH by Method 8015D and chloride by EPA Method 300. Table 4 presents the laboratory analytical data summary. Figure 3h presents the soil sample location map.

Benzene and BTEX were not reported above the OCD remediation limits of 10 mg/Kg and 50 mg/Kg, respectively. The laboratory reported TPH at 3,570.434 mg/Kg and above the OCD remediation limit of 2,500 mg/Kg.

Remediation Plan

AKA will excavate soil at the above locations to achieve the OCD's cleanup limit of 2,500 mg/Kg for TPH. The contaminated soil will be disposed at Lea Land Landfill. LAI personnel will collect confirmation soil samples from the bottom and sides of the excavations in accordance with OCD closure requirements in 19.15.29.12D(1) and analyze the samples for BTEX, TPH and chloride by EPA Methods SW-846 8021B, 8015D and 300, respectively. *Additional soil will be excavated where benzene, BTEX, TPH or chloride exceed the OCD remediation limits of 10 mg/Kg (benzene), 50 mg/Kg (BTEX), 2,500 mg/Kg (TPH) and 10,000 mg/Kg (chloride). The excavation will be backfilled with non-waste containing material with chloride less than 600 mg/Kg. Figure 4f presents the proposed remediation areas.*

3.0 REPORT

A final report will be prepared and submitted to OCD detailing the remediation results except for the PCB remediation (EA-10) which will be prepared and submitted to EPA Region 6. The report will include laboratory analytical data tables, drawings with GPS measured locations, drawings and laboratory reports.

Tables

Table 1
Soil Sample Organic Analytical Data Summary
AKA Energy Group LLC, Empirre Abo Plant
Eddy County, New Mexico

Investigation Area	Area Number	Boring Number	Depth (Feet)	Collection Date	Status	DEA (mg/Kg)	MEA (mg/Kg)	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/kg)	Chloride (mg/kg)
Cleanup Standard:						**--**	**--**	**10**	**50**				**100**	**600**
Wastewater Tanks	EA-02	01	0 - 2	07/25/2019	In-Situ	--	--	--	--	<10.8	43.6	26.8	70.4	77.2
			2.5 - 4	07/25/2019	In-Situ	--	--	--	--	<7.90	<7.90	<7.90	<7.90	467
			5 - 6.5	07/25/2019	In-Situ	--	--	--	--	<8.08	<8.08	<8.08	<8.08	238
			7.5 - 9	07/25/2019	In-Situ	--	--	--	--	<9.53	<9.53	<9.53	<9.53	191
			10 - 10.5	07/25/2019	In-Situ	--	--	--	--	<7.76	<7.76	<7.76	<7.76	75.1
		02	0 - 2	07/25/2019	In-Situ	--	--	--	--	<9.24	25.8	12.4	38.2	273
			2.5 - 4	07/25/2019	In-Situ	--	--	--	--	<9.01	<9.01	<9.01	<9.01	306
			5 - 6.5	07/25/2019	In-Situ	--	--	--	--	<8.03	<8.03	<8.03	<8.03	291
			7.5 - 8	07/25/2019	In-Situ	--	--	--	--	<10.5	<10.5	<10.5	<10.5	294
			10 - 11.25	07/25/2019	In-Situ	--	--	--	--	<7.10	<7.10	<7.10	<7.10	186
		03	0 - 2	07/25/2019	In-Situ	--	--	--	--	<8.86	51.4	14.2	65.6	787
			2.5 - 4	07/25/2019	In-Situ	--	--	--	--	<8.45	<8.45	<8.45	<8.45	318
			5 - 6.5	07/25/2019	In-Situ	--	--	--	--	<8.02	14.8	<8.02	14.8	300
			7.5 - 9	07/25/2019	In-Situ	--	--	--	--	<8.37	<8.37	<8.37	<8.37	296
			10 - 12	07/25/2019	In-Situ	--	--	--	--	<8.13	<8.13	<8.13	<8.13	252
Cleanup Standard:						**--**	**--**	**10**	**50**				**2,500**	**--**
Amine Sump	EA-03	01	0 - 2	07/25/2019	In-Situ	<500	<50	0.252	20.133	1,280	801	715	2,796	--
			2.5 - 3	07/25/2019	In-Situ	<500	<50	--	--	373	407	270	1,050	--
			5 - 5.5	07/25/2019	In-Situ	<500	<50	--	--	26.0	101	131		--
			7.5 - 8	07/25/2019	In-Situ	<500	<50	--	--	<8.83	36.6	29.6	66.2	--
			10 - 10.25	07/25/2019	In-Situ	<500	<50	--	--	<8.78	<8.78	<8.78	<8.78	--
		02	0 - 2	07/25/2019	In-Situ	<500	<50	0.0241	0.0441	278	650	635	1,563	--
			2.5 - 3	07/25/2019	In-Situ	<500	<50	--	--	2,930	2,590	2,430	7,950	--
			5 - 5.25	07/25/2019	In-Situ	<500	<50	--	--	11.3	37.3	45.3	93.9	--
			7.5 - 8	07/25/2019	In-Situ	<500	<50	--	--	<8.53	<8.53	<8.53	<8.53	--
			10 - 10.25	07/25/2019	In-Situ	<500	<50	--	--	<9.40	27.1	17.7	44.8	--
		03	0 - 2	07/25/2019	In-Situ	<500	<50	--	--	<8.03	30.6	20.5	51.1	--
			2.5 - 3.5	07/25/2019	In-Situ	<500	<50	0.00255	0.00479	896	2,810	2,610	6,316	--
			5 - 5.5	07/25/2019	In-Situ	<500	<50	--	--	93.9	523	291	907.9	--
			7.5 - 7.75	07/25/2019	In-Situ	<500	<50	--	--	109	565	486	1,159	--

Table 1
Soil Sample Organic Analytical Data Summary
AKA Energy Group LLC, Empirre Abo Plant
Eddy County, New Mexico

Investigation Area	Area Number	Boring Number	Depth (Feet)	Collection Date	Status	DEA (mg/Kg)	MEA (mg/Kg)	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/kg)	Chloride (mg/kg)
Cleanup Standard:						**--**	**--**	**10**	**50**				**100**	**600**
			10 - 10.25	07/25/2019	In-Situ	<500	<50	--	--	<8.34	241	73.8	314.8	--
		04	0 - 2	07/25/2019	In-Situ	<500	<50	0.0223	0.0833	<9.81	28.6	17.8	46.6	--
			2.5 - 4	07/25/2019	In-Situ	<500	<50	--	--	72.2	165	132	396.2	--
			5 - 7	07/25/2019	In-Situ	<500	<50	--	--	3,240	1,560	1,430	6,230	--
			7.5 - 9	07/25/2019	In-Situ	<500	<50	--	--	2,170	208	66.9	2,444.9	--
			10 - 10.25	07/25/2019	In-Situ	<500	<50	--	--	91.2	152	159	402.2	--
Cleanup Standard:						**--**	**--**	**10**	**50**				**2,500**	**10,000**
Slop Oil Tanks	EA-06	01	0 - 1	07/24/2019	In-Situ	--	--			<7.36	226	85.5	311	1,070
			2.5 - 3	07/24/2019	In-Situ	--	--			<9.29	<9.29	<9.29	<9.29	37.3
			5 - 5.5	07/24/2019	In-Situ	--	--			<8.22	<8.22	<8.22	<8.22	<23.2
			10 - 10.5	07/24/2019	In-Situ	--	--			<9.26	<9.26	<9.26	<9.26	34.6
			15 - 16	07/24/2019	In-Situ	--	--			<8.33	<8.33	<8.33	<8.33	25.2
			20 - 20.25	07/24/2019	In-Situ	--	--							
		02	0 - 1	07/24/2019	In-Situ	--	--	0.0172	8.4472	1,330	5,860	1,800	8,980	<27.8
			2.5 - 2.75	07/24/2019	In-Situ	--	--	--	--	<8.55	95	<8.55	95	79.6
			5 - 5.25	07/24/2019	In-Situ	--	--	--	--	<10.3	<10.3	<10.3	<10.3	<29.2
			10 - 10.25	07/24/2019	In-Situ	--	--	--	--	<8.97	<8.97	<8.97	<8.97	27.8
			15 - 15.25	07/24/2019	In-Situ	--	--	--	--	<7.72	<7.72	<7.72	<7.72	60.9
			20 - 20.25	07/24/2019	In-Situ	--	--	--	--					
		03	0 - 1	07/24/2019	In-Situ	--	--	0.00871	1.84871	124	1,190	1,080	2,390	<25.9
			1 - 1.5	07/24/2019	In-Situ	--	--	--	--	1,320	5,740	2,120	9,180	30.0
			2.5 - 2.75	07/24/2019	In-Situ	--	--	--	--	3,210	4,460	816	8,490	95.0
			5 - 5.25	07/24/2019	In-Situ	--	--	--	--	<8.72	76.6	<8.72	76.6	<23.7
			10 - 10.25	07/24/2019	In-Situ	--	--	--	--	<9.16	<9.16	<9.16	71.6	39.6
			15 - 15.25	07/24/2019	In-Situ	--	--	--	--	<8.40	50.6	18.2	68.8	98.6
			20 - 21	07/24/2019	In-Situ	--	--	--	--	32.4	217.0	12.7	262	30.2
			25 - 25.25	07/24/2019	In-Situ	--	--	--	--	<9.27	<9.27	<9.27	<9.27	32.6
		04	0 - 1	07/24/2019	In-Situ	--	--	<0.00147	0.01049	<9.70	65.4	101	166.4	78.1
			1 - 2	07/24/2019	In-Situ	--	--	--	--	<9.05	108	110	218	145
			2 - 2.5	07/25/2019	In-Situ	--	--	--	--	<8.84	<8.84	<8.84	<8.84	32.4

Table 1
Soil Sample Organic Analytical Data Summary
AKA Energy Group LLC, Empirre Abo Plant
Eddy County, New Mexico

Investigation Area	Area Number	Boring Number	Depth (Feet)	Collection Date	Status	DEA (mg/Kg)	MEA (mg/Kg)	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/kg)	Chloride (mg/kg)
Cleanup Standard:						**--**	**--**	**10**	**50**				**100**	**600**
			2.5 - 3	07/25/2019	In-Situ	--	--	--	--	<10.0	<10.0	<10.0	<10.0	60.8
			5 - 5.35	07/25/2019	In-Situ	--	--	--	--	<9.53	<9.53	<9.53	<9.53	<25.5
			10 - 10.5	07/25/2019	In-Situ	--	--	--	--	<9.08	188	246	434	48.3
			15 - 15.25	07/25/2019	In-Situ	--	--	--	--	<8.34	<8.34	<8.34	<8.34	69.2
			20 - 21	07/25/2019	In-Situ	--	--	--	--	<7.87	<7.87	<7.87	<7.87	35.7
		05	0 - 1	07/25/2019	In-Situ	--	--	<0.00127	<0.00127	<8.16	<8.16	<8.16	<8.16	32.9
			1 - 2	07/25/2019	In-Situ	--	--	--	--	<9.62	<9.62	<9.62	<9.62	34.9
			2 - 2.5	07/24/2019	In-Situ	--	--	--	--	<10.1	<10.1	<10.1	<10.1	<29.6
			2.5 - 3.5	07/24/2019	In-Situ	--	--	--	--	<9.33	<9.33	<9.33	<9.33	28.0
			5 - 5.25	07/24/2019	In-Situ	--	--	--	--	<8.85	<8.85	<8.85	<8.85	28.8
			10 - 10.25	07/24/2019	In-Situ	--	--	--	--	<9.23	<9.23	<9.23	<9.23	<26.3
			15 - 15.25	07/24/2019	In-Situ	--	--	--	--	<9.19	<9.19	<9.19	<9.19	163
			20 - 21	07/24/2019	In-Situ	--	--	--	--	<7.28	<7.28	<7.28	<7.28	26.5
Cleanup Standard:						**--**	**--**	**10**	**50**				**100**	**--**
Lube Oil Tanks	EA-08	01	0 - 2	07/25/2019	In-Situ	--	--	--	--	<8.66	<8.66	<8.66	<8.66	--
			2.5 - 4	07/25/2019	In-Situ	--	--	--	--	<8.51	<8.51	<8.51	<8.51	--
			5 - 6.5	07/25/2019	In-Situ	--	--	--	--	<8.54	<8.54	<8.54	<8.54	--
			7.5 - 8	07/25/2019	In-Situ	--	--	--	--	<10.5	<10.5	<10.5	<10.5	--
			10 - 11	07/25/2019	In-Situ	--	--	--	--	<9.04	<9.04	<9.04	<9.04	--
		02	0 - 2	07/25/2019	In-Situ	--	--	--	--	<9.36	<9.36	<9.36	<9.36	--
			2.5 - 4	07/25/2019	In-Situ	--	--	--	--	<9.02	<9.02	<9.02	<9.02	--
			5 - 5.5	07/25/2019	In-Situ	--	--	--	--	<7.53	<7.53	<7.53	<7.53	--
			7.5 - 8.5	07/25/2019	In-Situ	--	--	--	--	<8.72	<8.72	<8.72	<8.72	--
			10 - 10.25	07/25/2019	In-Situ	--	--	--	--	<8.21	<8.21	<8.21	<8.21	--
		03	0 - 2	07/26/2019	In-Situ	--	--	--	--	<9.57	<9.57	<9.57	<9.57	--
			2.5 - 4	07/26/2019	In-Situ	--	--	--	--	<9.20	<9.20	<9.20	<9.20	--
			5 - 6	07/26/2019	In-Situ	--	--	--	--	<7.38	<7.38	<7.38	<7.38	--
			7.5 - 8	07/26/2019	In-Situ	--	--	--	--	<9.39	<9.39	<9.39	<9.39	--
			10 - 10.5	07/26/2019	In-Situ	--	--	--	--	<9.65	<9.65	<9.65	<9.65	--
		04	0 - 2	07/26/2019	In-Situ	--	--	--	--	<9.93	<9.93	<9.93	<9.93	--

Table 1
Soil Sample Organic Analytical Data Summary
AKA Energy Group LLC, Empirre Abo Plant
Eddy County, New Mexico

Investigation Area	Area Number	Boring Number	Depth (Feet)	Collection Date	Status	DEA (mg/Kg)	MEA (mg/Kg)	Benzene (mg/Kg)	BTEX (mg/Kg)	C6 - C12 (mg/Kg)	C12 - C28 (mg/Kg)	C28 - C35 (mg/Kg)	TPH (mg/kg)	Chloride (mg/kg)
Cleanup Standard:						**--**	**--**	**10**	**50**				**100**	**600**
			2.5 - 3	07/26/2019	In-Situ	--	--	--	--	<7.54	<7.54	<7.54	<7.54	--
			5 - 5.25	07/26/2019	In-Situ	--	--	--	--	<7.04	<7.04	<7.04	<7.04	--
			7.5 - 8	07/26/2019	In-Situ	--	--	--	--	<7.83	<7.83	<7.83	<7.83	--
			10 - 10.5	07/26/2019	In-Situ	--	--	--	--	<9.59	<9.59	<9.59	<9.59	--

Notes: analysis performed by DHL Analytical, Round Rock, Texas

mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)

<: Denote concentration below analytical method reporting limit

--: No data available

Denotes concentration above OCD clean up limit (19.15.29 NMAC Table 1)

Denotes concentration below OCD clean up limit (19.15.29 NMAC Table 1) but exceeds OCD surface restoration limit of 600 mg/Kg (19.15.29.13 NMAC)

Table 2
Soil Sample Inorganic Analytical Data Summary
AKA Energy Group LLC, Empirre Abo Plant
Eddy County, New Mexico

Investigation Area	Area Number	Boring Number	Depth (Feet)	Collection Date	Status	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Mercury (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Chloride (mg/Kg)
***NMED Soil Screening Level:**						**17.7**	**100,000**	**564**	**340**	**800**	**68.4**	**568**	**568**	****600**
Cooling Tower	EA-07	01	0 - 2	07/26/2019	In-Situ	6.50	120	<0.112	42.8	3.76	<0.0168	0.685	<0.112	315
			2.5 - 3			<0.648	3.28	<0.130	3.58	0.1	<0.0191	<0.194	<0.130	40.2
			5 - 5.5			2.84	121	0.145	4.97	0.8	<0.0166	<0.177	<0.118	51.0
			7.5 - 7.75			12.6	44.1	0.196	19.1	5.88	0.0451	1.61	<0.132	70.4
		02	0 - 2	07/26/2019	In-Situ	**21.3**	138	0.441	422	26.0	0.0281	1.26	<0.111	349
			2.5 - 2.75			1.27	9	<0.134	47	1.4	<0.0200	<0.201	<0.134	<26.9
			5 - 5.25			4.80	4	0.189	4.30	1.2	<0.0152	0.291	<0.109	57.7
			7.5 - 7.75			<0.611	6.72	<0.122	4.91	0.4	<0.0180	<0.183	<0.122	31.6
		03	0 - 2	07/26/2019	In-Situ	2.13	24.5	<0.132	68.4	0.956	<0.0215	0.313	<0.132	470
			2.5 - 2.75			<0.609	8.98	<0.122	7.06	0.226	<0.0193	<0.183	<0.122	132
			5 - 6			3.59	14.5	0.138	5.00	0.946	<0.0183	0.174	<0.101	34.1
			7.5 - 7.75			7.16	110	<0.109	31.3	3.21	0.0431	1.71	<0.109	42.2
		04	0 - 2	07/26/2019	In-Situ	4.80	137	0.148	44.4	5.47	<0.0187	1.62	<0.119	62.3
			2.5 - 4			6.43	62.1	0.243	13.1	4.08	0.0183	0.632	<0.108	130
			5.0 - 5.5			3.20	14.9	0.157	6.55	1.57	<0.0153	0.828	<0.0998	104
			7.5 - 7.75			<0.574	1.58	<0.115	0.979	0.125	<0.0162	<0.172	<0.115	<22.5
		05	0 - 2	07/26/2019	In-Situ	7.69	139	0.261	238	14.8	0.150	1.08	<0.109	48.8
			2.5 - 3			7.45	177	0.430	205	17.9	0.0522	1.12	<0.108	55.1
			5 - 6			8.64	197	0.438	**427**	21.4	0.449	1.48	<0.123	153
		06	0 - 2	07/26/2019	In-Situ	4.04	165	0.147	19.4	6.61	<0.0180	1.77	<0.106	543
			2.5 - 3.5			<0.690	2.18	<0.138	3.76	0.173	<0.0207	<0.207	<0.138	95.4
			5 - 5.25			0.625	1.41	<0.116	3.77	0.152	<0.0188	<0.173	<0.116	117

Notes: analysis performed by Permian Basin Environmental Lab, Midland, Texas by Method TX1005 (TPH) and EPA Method 300E (chloride)
mg/Kg: milligrams per kilogram equivalent to parts per million (ppm)
* New Mexico Environment Department (NMED) screening level for industrial/occupational soil
** New Mexico Oil Conservation Division (OCD) cleanup limit for depth to groundwater less than 50 feet below ground surface (bgs)
Denotes concentration above NMED Soil Screening Level

Table 2
Soil Sample Inorganic Analytical Data Summary
AKA Energy Group LLC, Empirre Abo Plant
Eddy County, New Mexico

Investigation Area	Area Number	Boring Number	Depth (Feet)	Collection Date	Status	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Mercury (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)	Chloride (mg/Kg)
*NMED Soil Screening Level:						17.7	100,000	564	340	800	68.4	568	568	**600

EA-02	Wastewater
EA-03	Amine Sump
EA-02	Wastewater Tanks
EA-03	Amine Sump
EA-06	Slop Oil Tanks
EA-07	Cooling Tower
EA-08	Lube Oil Tanks

Table 3

PCB Soil Sample Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample	Depth (Feet BGS)	Collection Date	Field PCB (ppm)	Aroclor 1016 (mg/Kg)	Aroclor 1221 (mg/Kg)	Aroclor 1232 (mg/Kg)	Aroclor 1242 (mg/Kg)	Aroclor 1248 (mg/Kg)	Aroclor 1254 (mg/Kg)	Aroclor 1260 (mg/Kg)	Total PCB (mg/Kg)
Concrete (Composite) Samples, (mg/Kg)											
C-1	--	6/11/2019		<0.05	<0.05	<0.05	<0.05	<0.05	**51.2**	<0.05	**51.2**
Comp #1	--	6/11/2019		<0.09	<0.09	<0.09	<0.09	<0.09	0.943	<0.09	0.943
Comp #3	--	6/28/2019		<0.05	<0.05	<0.05	<0.05	<0.05	0.219	<0.05	0.219
Comp #4	--	6/28/2019		<0.05	<0.05	<0.05	<0.05	<0.05	0.067	<0.05	0.067
Soil (Grab) Samples (mg/Kg)											
S-1	0 - 0.5	6/11/2019	--	<0.0658	<0.0658	<0.0658	<0.0658	<0.0658	0.921	<0.0658	0.921
S-2	0 - 0.5	6/11/2019	--	<0.0661	<0.0661	<0.0661	<0.0661	<0.0661	**1.97**	<0.0661	**1.97**
S-3	0 - 0.5	6/11/2019	--	<0.0539	<0.0539	<0.0539	<0.0539	<0.0539	**2.91**	<0.0539	**2.91**
S-4	0 - 0.5	6/14/2019	--	<0.0514	<0.0514	<0.0514	<0.0514	<0.0514	0.936	<0.0514	0.936
S-5	0 - 0.5	6/14/2019	--	<0.0589	<0.0589	<0.0589	<0.0589	<0.0589	**1.29**	<0.0589	**1.29**
S-6	0 - 0.5	6/14/2019	--	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	0.186	<0.0597	0.186
Soil (Composite) Samples (mg/Kg)											
Comp #3	--	6/11/2019	--	<0.0527	<0.0527	<0.0527	<0.0527	<0.0527	0.576	<0.0527	0.576
Drum Comp	--	6/28/2019	--	<0.0554	<0.0554	<0.0554	<0.0554	<0.0554	**13.9**	<0.0554	**13.9**
Soil (Boring) Samples (mg/Kg)											
BH-04	0 - 1	6/16/2009		<5.61	<5.61	<5.61	<5.61	<5.61	**153**	**150**	**303**
	0 - 2	5/29/2019		<5.62	<5.62	<5.62	<5.62	<5.62	**257**	<5.62	**257**
	2 - 2.5	5/29/2019		<0.0589	<0.0589	<0.0589	<0.0589	<0.0589	**3.46**	<0.0589	**3.46**
	5	6/16/2009		<0.0572	<0.0572	<0.0572	<0.0572	<0.0572	0.748	0.721	**1.469**
	10	6/16/2009		<0.0575	<0.0575	<0.0575	<0.0575	<0.0575	0.145	0.128	0.273
10-01	0 - 1.3	6/26/2019	<50	<0.0603	<0.0603	<0.0603	<0.0603	<0.0603	**5.03**	<0.0603	**5.03**
	2 - 3		<50	<0.0554	<0.0554	<0.0554	<0.0554	<0.0554	**10.7**	<0.0554	**10.7**
	4 - 4.5		<50	<0.0523	<0.0523	<0.0523	<0.0523	<0.0523	0.318	<0.0523	0.318
	6 - 6.25		<50	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
	6 - 6.25		<50	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600	<0.0600
	8 - 8.5		<50	<0.0607	<0.0607	<0.0607	<0.0607	<0.0607	<0.0607	<0.0607	<0.0607

Table 3

PCB Soil Sample Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample ID	Depth (Feet BGS)	Collection Date	Field PCB (ppm)	Aroclor 1016 (mg/Kg)	Aroclor 1221 (mg/Kg)	Aroclor 1232 (mg/Kg)	Aroclor 1242 (mg/Kg)	Aroclor 1248 (mg/Kg)	Aroclor 1254 (mg/Kg)	Aroclor 1260 (mg/Kg)	Total PCB (mg/Kg)
10-2	0 - 0.5	6/26/2019	<50	<0.0608	<0.0608	<0.0608	<0.0608	<0.0608	**168**	<0.0608	**168**
	2 - 3		<50	<0.0575	<0.0575	<0.0575	<0.0575	<0.0575	**85.6**	<0.0575	**85.6**
	4 - 4.5		<50	<0.0609	<0.0609	<0.0609	<0.0609	<0.0609	**34.6**	<0.0609	**34.6**
	6 - 7		<50	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	**24.2**	<0.0597	**24.2**
10-3	0 - 1.5	6/26/2019	<50	<0.0504	<0.0504	<0.0504	<0.0504	<0.0504	**5.80**	<0.0504	**5.80**
	2 - 2.25		<50	<0.0553	<0.0553	<0.0553	<0.0553	<0.0553	**3.33**	<0.0553	**3.33**
	4 - 4.25		<50	<0.0586	<0.0586	<0.0586	<0.0586	<0.0586	<0.0586	<0.0586	<0.0586
	6 - 7		<50								
10-4	0 - 1	6/26/2019	<50	<0.0612	<0.0612	<0.0612	<0.0612	<0.0612	**1.83**	<0.0612	**1.83**
	2 - 2.25		<50	<0.0602	<0.0602	<0.0602	<0.0602	<0.0602	0.0697	<0.0602	0.0697
	4 - 5		<50	<0.0605	<0.0605	<0.0605	<0.0605	<0.0605	<0.0605	<0.0605	<0.0605
10-5	0 - 1	6/26/2019	<50	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	0.210	<0.0597	0.210
	2 - 3		<50	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597
	4 - 4.5		<50	<0.0596	<0.0596	<0.0596	<0.0596	<0.0596	<0.0596	<0.0596	<0.0596
	6 - 6.75		<50	<0.0608	<0.0608	<0.0608	<0.0608	<0.0608	0.115	<0.0608	0.115
	8 - 8.5		<50	<0.0588	<0.0588	<0.0588	<0.0588	<0.0588	0.300	<0.0588	0.300
	8.5 - 10		<50	<0.0578	<0.0578	<0.0578	<0.0578	<0.0578	<0.0578	<0.0578	<0.0578
10-6	3 - 4	6/27/2019	<50	<0.0573	<0.0573	<0.0573	<0.0573	<0.0573	**2.08**	<0.0573	**2.08**
	5 - 6		<50	<0.0548	<0.0548	<0.0548	<0.0548	<0.0548	**7.30**	<0.0548	**7.30**
	7 - 7.5		<50	<0.0568	<0.0568	<0.0568	<0.0568	<0.0568	0.0725	<0.0568	0.0725
10-7	3 - 3.25	6/27/2019	--	<0.0606	<0.0606	<0.0606	<0.0606	<0.0606	0.913	<0.0606	0.913
10-8	0 - 0.25	6/27/2019	<50	<0.0604	<0.0604	<0.0604	<0.0604	<0.0604	<0.0604	<0.0604	<0.0604
	0 - 0.25	6/27/2019	<50	<0.0604	<0.0604	<0.0604	<0.0604	<0.0604	<0.0604	<0.0604	<0.0604
10-9	0 - 1.25	6/27/2019	<50	<0.0536	<0.0536	<0.0536	<0.0536	<0.0536	<0.0536	<0.0536	<0.0536
	2 - 2.25		>50	<0.0590	<0.0590	<0.0590	<0.0590	<0.0590	**1,390**	<0.0590	**1,390**

Table 3

PCB Soil Sample Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample ID	Depth (Feet BGS)	Collection Date	Field PCB (ppm)	Aroclor 1016 (mg/Kg)	Aroclor 1221 (mg/Kg)	Aroclor 1232 (mg/Kg)	Aroclor 1242 (mg/Kg)	Aroclor 1248 (mg/Kg)	Aroclor 1254 (mg/Kg)	Aroclor 1260 (mg/Kg)	Total PCB (mg/Kg)
	4 - 4.25		>50	<0.0588	<0.0588	<0.0588	<0.0588	<0.0588	**27.4**	<0.0588	**27.4**
10-10	0 - 1.25	6/27/2019	<50	<0.0522	<0.0522	<0.0522	<0.0522	<0.0522	<0.0522	<0.0522	<0.0522
	2 - 3		>50	<0.0627	<0.0627	<0.0627	<0.0627	<0.0627	**75.5**	<0.0627	**75.5**
	4 - 4.25		>50	<0.0588	<0.0588	<0.0588	<0.0588	<0.0588	**61.9**	<0.0588	**61.9**
10-11	0 - 1	6/27/2019	<50	<0.0609	<0.0609	<0.0609	<0.0609	<0.0609	**1.76**	<0.0609	**1.76**
	2 - 2.25		<50	<0.0580	<0.0580	<0.0580	<0.0580	<0.0580	**24.8**	<0.0580	**24.8**
	3 - 3.25		<50	<0.0593	<0.0593	<0.0593	<0.0593	<0.0593	**8.81**	<0.0593	**8.81**
10-12	0 - 1.25	6/27/2019	--	<0.0605	<0.0605	<0.0605	<0.0605	<0.0605	0.141	<0.0605	0.141
	2 - 3.5		<50	<0.0630	<0.0630	<0.0630	<0.0630	<0.0630	**4.99**	<0.0630	**4.99**
	4 - 4.5		<50	<0.0594	<0.0594	<0.0594	<0.0594	<0.0594	**3.10**	<0.0594	**3.10**
	6 - 6.5		--	<0.0629	<0.0629	<0.0629	<0.0629	<0.0629	0.183	<0.0629	0.183
10-13	0 - 0.5	6/27/2019	--	<0.0563	<0.0563	<0.0563	<0.0563	<0.0563	0.107	<0.0563	0.107
	2 - 2.25		<50	<0.0565	<0.0565	<0.0565	<0.0565	<0.0565	0.309	<0.0565	0.309
	3 - 4		--	<0.0643	<0.0643	<0.0643	<0.0643	<0.0643	<0.0643	<0.0643	<0.0643
10-14	0 - 1.5	6/27/2019	--	<0.0538	<0.0538	<0.0538	<0.0538	<0.0538	<0.0538	<0.0538	<0.0538
	2 - 2.5		--	<0.0539	<0.0539	<0.0539	<0.0539	<0.0539	<0.0539	<0.0539	<0.0539
	4 - 4.25		<50	<0.0603	<0.0603	<0.0603	<0.0603	<0.0603	**7.52**	<0.0603	**7.52**
10-15	0 - 1.25	6/27/2019	<50	<0.0528	<0.0528	<0.0528	<0.0528	<0.0528	0.310	<0.0528	0.310
	2 - 2.25		<50	<0.0657	<0.0657	<0.0657	<0.0657	<0.0657	**9.57**	<0.0657	**9.57**
	4 - 4.5		--	<0.0595	<0.0595	<0.0595	<0.0595	<0.0595	**59.5**	<0.0595	**59.5**
10-16	0 - 1.5	6/27/2019	--	<0.0519	<0.0519	<0.0519	<0.0519	<0.0519	<0.0519	<0.0519	<0.0519
	2 - 2.5		--	<0.0596	<0.0596	<0.0596	<0.0596	<0.0596	**976**	<0.0596	**976**
	4 - 4.25		--	<0.0605	<0.0605	<0.0605	<0.0605	<0.0605	**31.1**	<0.0605	**31.1**
10-17	0 - 1.5	6/27/2019	--	<0.0544	<0.0544	<0.0544	<0.0544	<0.0544	<0.0544	<0.0544	<0.0544

Table 3

PCB Soil Sample Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample ID	Depth (Feet BGS)	Collection Date	Field PCB (ppm)	Aroclor 1016 (mg/Kg)	Aroclor 1221 (mg/Kg)	Aroclor 1232 (mg/Kg)	Aroclor 1242 (mg/Kg)	Aroclor 1248 (mg/Kg)	Aroclor 1254 (mg/Kg)	Aroclor 1260 (mg/Kg)	Total PCB (mg/Kg)
	2 - 2.5		<50	<0.0595	<0.0595	<0.0595	<0.0595	<0.0595	<0.0595	<0.0595	<0.0595
	4 - 4.25		--	<0.0582	<0.0582	<0.0582	<0.0582	<0.0582	0.166	<0.0582	0.166
10-18	0 - 1.75	6/27/2019	--	<0.0701	<0.0701	<0.0701	<0.0701	<0.0701	0.0803	<0.0701	0.0803
	2 - 2.25		<50	<0.0574	<0.0574	<0.0574	<0.0574	<0.0574	<0.0574	<0.0574	<0.0574
	4 - 4.5		--	<0.0607	<0.0607	<0.0607	<0.0607	<0.0607	0.0755	<0.0607	0.0755
10-19	0 - 1	6/27/2019	--	<0.0514	<0.0514	<0.0514	<0.0514	<0.0514	0.412	<0.0514	0.412
	2 - 2.5		--	<0.0570	<0.0570	<0.0570	<0.0570	<0.0570	**2.48**	<0.0570	**2.48**
10-20	0 - 1.5	6/27/2019	--	<0.0507	<0.0507	<0.0507	<0.0507	<0.0507	<0.0507	<0.0507	<0.0507
	2 - 3		<50	<0.0612	<0.0612	<0.0612	<0.0612	<0.0612	**1.20**	<0.0612	**1.20**
	4 - 4.5		--	<0.0583	<0.0583	<0.0583	<0.0583	<0.0583	<0.0583	<0.0583	<0.0583
10-21	0 - 1.5	6/28/2019	--	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	0.0672	<0.0537	0.0672
	2 - 2.5		--	<0.0596	<0.0596	<0.0596	<0.0596	<0.0596	0.137	<0.0596	0.137
	4 - 4.25		--	<0.0606	<0.0606	<0.0606	<0.0606	<0.0606	<0.0606	<0.0606	<0.0606
10-22	0 - 1	6/28/2019	--	<0.0551	<0.0551	<0.0551	<0.0551	<0.0551	**160**	<0.0551	**160**
	2 - 2.25		--	<0.0603	<0.0603	<0.0603	<0.0603	<0.0603	0.838	<0.0603	0.838
	4 - 5		--	<0.0592	<0.0592	<0.0592	<0.0592	<0.0592	**5.11**	<0.0592	**5.11**
10-23	0 - 1	6/28/2019	--	<0.0519	<0.0519	<0.0519	<0.0519	<0.0519	0.142	<0.0519	0.142
	2 - 2.25		--	<0.0601	<0.0601	<0.0601	<0.0601	<0.0601	0.553	<0.0601	0.553
	4 - 4.25		--	<0.0603	<0.0603	<0.0603	<0.0603	<0.0603	**1.44**	<0.0603	**1.44**
10-24	0 - 1.5	6/28/2019	--	<0.0635	<0.0635	<0.0635	<0.0635	<0.0635	0.441	<0.0635	0.441
	2 - 2.5		--	<0.0570	<0.0570	<0.0570	<0.0570	<0.0570	**3.10**	<0.0570	**3.10**
10-25	0 - 1.5	6/28/2019	--	<0.0608	<0.0608	<0.0608	<0.0608	<0.0608	0.380	<0.0608	0.380
	2 - 3		--	<0.0554	<0.0554	<0.0554	<0.0554	<0.0554	0.487	<0.0554	0.487

Table 3

PCB Soil Sample Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample ID	Depth (Feet BGS)	Collection Date	Field PCB (ppm)	Aroclor 1016 (mg/Kg)	Aroclor 1221 (mg/Kg)	Aroclor 1232 (mg/Kg)	Aroclor 1242 (mg/Kg)	Aroclor 1248 (mg/Kg)	Aroclor 1254 (mg/Kg)	Aroclor 1260 (mg/Kg)	Total PCB (mg/Kg)
10-26	0 - 1.5	6/28/2019	--	<0.0554	<0.0554	<0.0554	<0.0554	<0.0554	**12.2**	<0.0554	**12.2**
	2 - 2.75		--	<0.0591	<0.0591	<0.0591	<0.0591	<0.0591	**1.34**	<0.0591	**1.34**
10-27	0 - 1.5	6/28/2019	--	<0.0594	<0.0594	<0.0594	<0.0594	<0.0594	<0.0594	<0.0594	<0.0594
	2 - 2.75		--	<0.0613	<0.0613	<0.0613	<0.0613	<0.0613	0.127	<0.0613	0.127
	4 - 4.5		--	<0.0529	<0.0529	<0.0529	<0.0529	<0.0529	<0.0529	<0.0529	<0.0529

Notes: analysis performed by Dexsil Corporation (concrete) and DHL Analytical (Soil) by EPA SW-846 Method 8082

mg/K: concentration in milligrams per kilogram equivalent to parts per million (ppm)

<: concentration below analytical method reporting limit

--: no data available

Denotes: concentration exceeds EPA clean-up limit for full time occupancy (1.0 mg/Kg)

Table 4

Main Compressor (Clark) Building Soil Sample BTEX and TPH Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample	Depth (Feet BGS)	Collection Date	Benzene (mg/Kg)	BTEX (mg/Kg)	C6-C12 (mg/Kg)	>C12-C28 (mg/Kg)	>C28-C35 (mg/Kg)	C6-C35 (mg/Kg)	Chloride (mg/Kg)
Remediation Limit:			**10**	**50**				**2,500**	**10,000**
C-1	0.5	10/14/2019	<0.0524	<0.2010	<2.09	12.0	11.7	23.7	--
	1.0	10/14/2019	N/S	N/S	N/S	N/S	N/S	N/S	--
C-2	0.5	10/14/2019	<0.0529	<0.2116	C-2, 1.0 feet (	929	1,310	2,239	--
	*1.0	10/14/2019	<0.525	<0.2100	<2.10	1,030	2,040	**3,070**	--
C-3	0.5	10/14/2019	<0.0539	<0.2156	<2.15	578	1,890	2,468	--
	*1.0	10/14/2019	<0.0572	<0.2288	<2.29	649	2,670	**3,319**	--
C-4	0.5	10/14/2019	<0.0559	<0.2236	<2.23	662	1,610	2,272	--
	1.0	10/14/2019	<0.0559	<0.2236	2.29	1,010	4,230	**5,242.29**	--
	*1.5	11/7/2019	--	--	<27.8	195	247	442	--
C-5	0.5	10/14/2019	<0.0662	<0.2488	<2.49	343	948	1,291	--
	1.0	10/14/2019	N/S	N/S	N/S	N/S	N/S	N/S	--
C-6	0.5	10/14/2019	<0.0714	<0.2856	<2.86	36.3	95.2	131.5	--
	1.0	10/14/2019	<0.0588	<0.2352	<2.35	365	498	863	--
C-7	0.5	10/14/2019	<0.0592	<0.2368	<2.37	26.7	43.4	70.1	--
	1.0	10/14/2019	N/S	N/S	N/S	N/S	N/S	N/S	--
C-8	0.5	10/14/2019	<0.0607	<0.2428	<2.43	1,260	1,040	2,300	--
	1.0	10/14/2019	N/S	N/S	N/S	N/S	N/S	N/S	--
C-9	0.5	10/14/2019	<0.0596	<0.2384	<2.38	504	1,850	2,354	--
	1.0	10/14/2019	<0.0612	<0.2448	<2.45	247	989	1,236	--
C-10	0.5	10/14/2019	<0.0638	<0.2552	<2.55	696	2,310	**3,006**	--
	1.0	11/7/2019	--	--	67.8	793	846	1,706.8	--
	*2.0	11/7/2019	--	--	<30.5	310	167	477	--
C-11	0.5	10/14/2019	<0.0600	<0.2400	<2.40	767	2,400	**3,167**	--
	1.0	10/14/2019	<0.0634	<0.2536	<2.54	1,590	4,770	**6,360**	--
	*2.0	11/7/2019	--	--	37.1	1,790	2,130	**3,957.1**	--
C-12	0.5	10/14/2019	0.165	0.637	103	13,200	4,870	**18,173**	--
	1.0	10/14/2019	<0.0627	<0.2508	26.5	15,200	9,550	**24,776.5**	--
	3.0	11/7/2019	--	--	1390	10,500	3,740	**15,630**	--
	5.0	11/7/2019	--	--	530	3,600	708	**4,838**	--
	*7.0	11/7/2019	--	--	787	3,700	564	**5,051**	--

Table 4

Main Compressor (Clark) Building Soil Sample BTEX and TPH Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample	Depth (Feet BGS)	Collection Date	Benzene (mg/Kg)	BTEX (mg/Kg)	C6-C12 (mg/Kg)	>C12-C28 (mg/Kg)	>C28-C35 (mg/Kg)		C6-C35 (mg/Kg)
Remediation Limit:			**10**	**50**					**2,500**
C-13	0.5	10/14/2019	<0.0585	<0.234	<2.34	4,690	19,900	**24,590**	--
	1.0	10/14/2019	<0.0590	<0.236	<2.36	3,370	14,100	**17,470**	--
	*2.0	11/7/2019	--	--	<30.5	77.7	39.2	116.9	--
C-14	0.5	10/14/2019	<0.0628	<0.2512	74.6	2,500	855	**3,429.6**	--
	1.0	10/14/2019	<0.0620	<0.2480	3.42	1,200	1,140	2,343.42	--
C-15	0.5	10/14/2019	<0.0649	<0.2596	60.8	3,760	608	**4,428.8**	--
	1.0	10/14/2019	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	2.0	11/7/2019	--	--	1790	11100	1760	**14,650**	--
	*3.0	11/7/2019	--	--	2,170	9,580	1,450	**13,200**	--
C-16	0.5	10/14/2019	<0.0576	<0.2304	<2.30	2,390	1,270	**3,660**	--
	1.0	10/14/2019	N/S	N/S	N/S	N/S	N/S	N/S	N/S
	2.0	11/7/2019	--	--	<26.3	492	479	971	--
	*3.0	11/7/2019	--	--	<30.9	572	564	1,136	--
C-17	0.5	10/14/2019	<0.0594	<0.2376	2.94	513	562	1,075	--
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S
Compressor (Engine 9) Building									
Eng 9	3.0	6/12/2019	<0.00114	0.01262	0.434	3,570	--	3,570.43	41.7

Notes: analysis performed by DHL Analytical, Round Rock, Texas, by EPA SW-846 Method 8260C (BTEX) and Method 8015D (TPH)

mg/K: concentration in milligrams per kilogram equivalent to parts per million (ppm)

<: concentration below analytical method reporting limit

N/S: no sample collected - auger refusal

Denotes: concentration exceeds OCD closure limit in Table 1 (19.15.29 NMAC)

Table 5

Main Compressor (Clark) Building Soil Sample Total Metals Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample	Depth (Feet BGS)	Collection Date	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead (mg/Kg)	Mercury (mg/Kg)	Selenium (mg/Kg)	Silver (mg/Kg)
Remediation Limit:			**17.7**	**100,000**	**564**	**340**	**800**	**68.4**	**568**	**568**
C-1	0.5	10/14/2019	1.97	205	0.326	10.8	5.30	<0.0159	1.28	<0.0997
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-2	0.5	10/14/2019	2.25	238	0.650	10.6	8.04	0.0378	1.55	<0.0944
	1.0		2.18	2.96	0.535	9.96	8.57	0.0272	1.62	<0.0921
C-3	0.5	10/14/2019	2.60	231	0.306	11.3	5.85	0.0436	1.34	<0.0898
	1.0		3.95	287	0.165	10.3	3.92	0.0522	1.19	<0.104
C-4	0.5	10/14/2019	7.27	321	0.422	13.6	23.4	0.0630	1.36	<0.0931
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-5	0.5	10/14/2019	3.61	146	0.633	46.9	18.2	0.233	1.15	<0.0998
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-6	0.5	10/14/2019	4.66	132	0.535	21.3	15.7	0.150	0.893	<0.119
	1.0		4.46	73.0	<0.116	16.4	7.27	<0.0219	0.586	<0.116
C-7	0.5	10/14/2019	6.82	306	0.292	32.9	28.4	0.240	2.37	<0.0980
	1.0		7.67	508	0.214	26.8	10.6	<0.0176	3.53	<0.101
C-8	0.5	10/14/2019	4.81	228	0.209	19.5	13.9	0.111	1.25	<0.109
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-9	0.5	10/14/2019	5.97	314	0.658	83.4	13.8	0.278	1.24	<0.115
	1.0		3.87	193	0.326	59.8	10.4	0.123	1.10	<1.06
C-10	0.5	10/14/2019	3.59	114	0.318	16.0	11.7	1.26	1.02	<0.114
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-11	0.5	10/14/2019	2.80	81.3	0.284	25.2	5.11	0.0714	1.20	<0.105
	1.0		3.08	89.6	0.242	40.3	7.46	0.0829	1.11	<0.11
C-12	0.5	10/14/2019	3.79	207	0.174	16.0	26.1	0.0285	1.29	<0.113
	1.0		3.18	110	<0.115	15.5	13.5	0.0554	1.14	<0.115
C-13	0.5	10/14/2019	6.45	193	1.40	363	48.3	1.77	1.61	<0.0974
	1.0		4.45	143	1.30	1.51	96.1	3.03	1.23	<0.108
C-14	0.5	10/14/2019	5.87	86.9	0.181	27.1	7.48	0.140	1.48	<0.110
	1.0		6.21	176	0.841	163	29.2	0.238	2.19	<0.109
C-15	0.5	10/14/2019	5.51	65.8	<0.118	29.5	3.56	0.0196	1.51	<0.118

Table 5

Main Compressor (Clark) Building Soil Sample Total Metals Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample	Depth (Feet BGS)	Collection Date	Arsenic (mg/Kg)	Barium (mg/Kg)	Cadmium (mg/Kg)	Chromium (mg/Kg)	Lead 1016 (mg/Kg)	Mercury 1221 (mg/Kg)	Selenium 1232 (mg/Kg)	Silver 1242 (mg/Kg)
Remediation Limit:			**17.7**	**100,000**	**564**	**340**	**800**	**68.4**	**568**	**568**
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-16	0.5	10/14/2019	13.8	92.9	0.293	31.3	20.7	0.106	1.06	<0.114
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-17	0.5	10/14/2019	2.74	85.5	0.377	19.5	17.1	0.0647	0.773	<0.112
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S

Notes: analysis performed by DHL Analytical, Round Rock, Texas, by EPA SW-846 Method 8015D (TPH) and Method 8082 (PCB)

mg/K: concentration in milligrams per kilogram equivalent to parts per million (ppm)

<: concentration below analytical method reporting limit

N/S: no sample collected - auger refusal

Table 6

Main Compressor (Clark) Building Soil Sample PCB Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample	Depth (Feet BGS)	Collection Date	Aroclor 1016 (mg/Kg)	Aroclor 1221 (mg/Kg)	Aroclor 1232 (mg/Kg)	Aroclor 1242 (mg/Kg)	Aroclor 1248 (mg/Kg)	Aroclor 1254 (mg/Kg)	Aroclor 1260 (mg/Kg)	Total PCB (mg/Kg)
Remediation Limit:										**25**
C-1	0.5	10/14/2019	<0.0517	<0.0517	<0.0517	<0.0517	<0.0517	**0.0661**	<0.0517	**0.0661**
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-2	0.5	10/14/2019	<0.0513	<0.0513	<0.0513	<0.0513	<0.0513	**0.109**	<0.0513	**0.0109**
	1.0		<0.0501	<0.0501	<0.0501	<0.0501	<0.0501	**0.0997**	<0.0501	**0.0997**
C-3	0.5	10/14/2019	<0.0537	<0.0537	<0.0537	<0.0537	<0.0537	**0.462**	<0.0537	**0.462**
	1.0		<0.0564	<0.0564	<0.0564	<0.0564	<0.0564	**0.175**	<0.0564	**0.175**
C-4	0.5	10/14/2019	<0.0548	<0.0548	<0.0548	<0.0548	<0.0548	**0.135**	<0.0548	**0.135**
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-5	0.5	10/14/2019	<0.0543	<0.0543	<0.0543	<0.0543	<0.0543	**1.41**	<0.0543	**1.41**
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-6	0.5	10/14/2019	<0.0578	<0.0551	<0.0578	<0.0578	<0.0578	**0.166**	<0.0578	**0.166**
	1.0		<0.0678	<0.0678	<0.0678	<0.0678	<0.0678	<0.0678	<0.0678	<0.0678
C-7	0.5	10/14/2019	<0.0551	<0.0551	<0.0551	<0.0551	<0.0551	<0.0551	<0.0551	<0.0551
	1.0		<0.0561	<0.0561	<0.0561	<0.0561	<0.0561	<0.0561	<0.0561	<0.0561
C-8	0.5	10/14/2019	<0.0559	<0.0559	<0.0559	<0.0559	<0.0559	**0.708**	<0.0559	**0.708**
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-9	0.5	10/14/2019	<0.0584	<0.0584	<0.0584	<0.0584	<0.0584	**7.62**	<0.0584	**7.62**
	1.0		<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597	<0.0597
C-10	0.5	10/14/2019	<0.0633	<0.0633	<0.0633	<0.0633	<0.0633	**0.0841**	<0.0633	**0.0841**
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-11	0.5	10/14/2019	<0.0590	<0.0590	<0.0590	<0.0590	<0.0590	**0.140**	<0.0590	**0.140**
	1.0		<0.0628	<0.0628	<0.0628	<0.0628	<0.0628	**0.149**	<0.0628	**0.149**
C-12	0.5	10/14/2019	<0.0632	<0.0632	<0.0632	<0.0632	<0.0632	**0.0845**	<0.0632	**0.0845**
	1.0		<0.0591	<0.0591	<0.0591	<0.0591	<0.0591	**0.163**	<0.0591	**0.163**
C-13	0.5	10/14/2019	<0.0573	<0.0573	<0.0573	<0.0573	<0.0573	<0.0573	<0.0573	<0.0573
	1.0		<0.0580	<0.0580	<0.0580	<0.0580	<0.0580	<0.0580	<0.0580	<0.0580
C-14	0.5	10/14/2019	<0.0613	<0.0613	<0.0613	<0.0613	<0.0613	<0.0613	<0.0613	<0.0613
	1.0		<0.0590	<0.0590	<0.0590	<0.0590	<0.0590	**0.0916**	<0.0590	<0.0590
C-15	0.5	10/14/2019	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625	<0.0625

Table 6

Main Compressor (Clark) Building Soil Sample PCB Analytical Data Summary

Empire Abo Gas Plant, Eddy County, New Mexico

Sample	Depth (Feet BGS)	Collection Date	Aroclor 1016 (mg/Kg)	Aroclor 1221 (mg/Kg)	Aroclor 1232 (mg/Kg)	Aroclor 1242 (mg/Kg)	Aroclor 1248 (mg/Kg)	Aroclor 1254 (mg/Kg)	Aroclor 1260 (mg/Kg)	Total PCB (mg/Kg)
Remediation Limit:										**25**
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-16	0.5	10/14/2019	<0.0586	<0.0586	<0.0586	<0.0586	<0.0586	**0.177**	<0.0586	**0.177**
	1.0		N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
C-17	0.5	10/14/2019	<0.0565	<0.0565	<0.0565	<0.0565	<0.0565	**0.0682**	<0.0565	**0.0682**
	1.0		<0.0602	<0.0602	<0.0602	<0.0602	<0.0602	0.0697	<0.0602	0.0697

Notes: analysis performed by DHL Analytical, Round Rock, Texas, by EPA SW-846 Method 8082A

mg/K: concentration in milligrams per kilogram equivalent to parts per million (ppm)

<: concentration below analytical method reporting limit

N/S: no sample collected - auger refusal

Denotes: concentration reported above analytical method reporting limit and below EPA remediation limit for low occupany

Figures

JWW

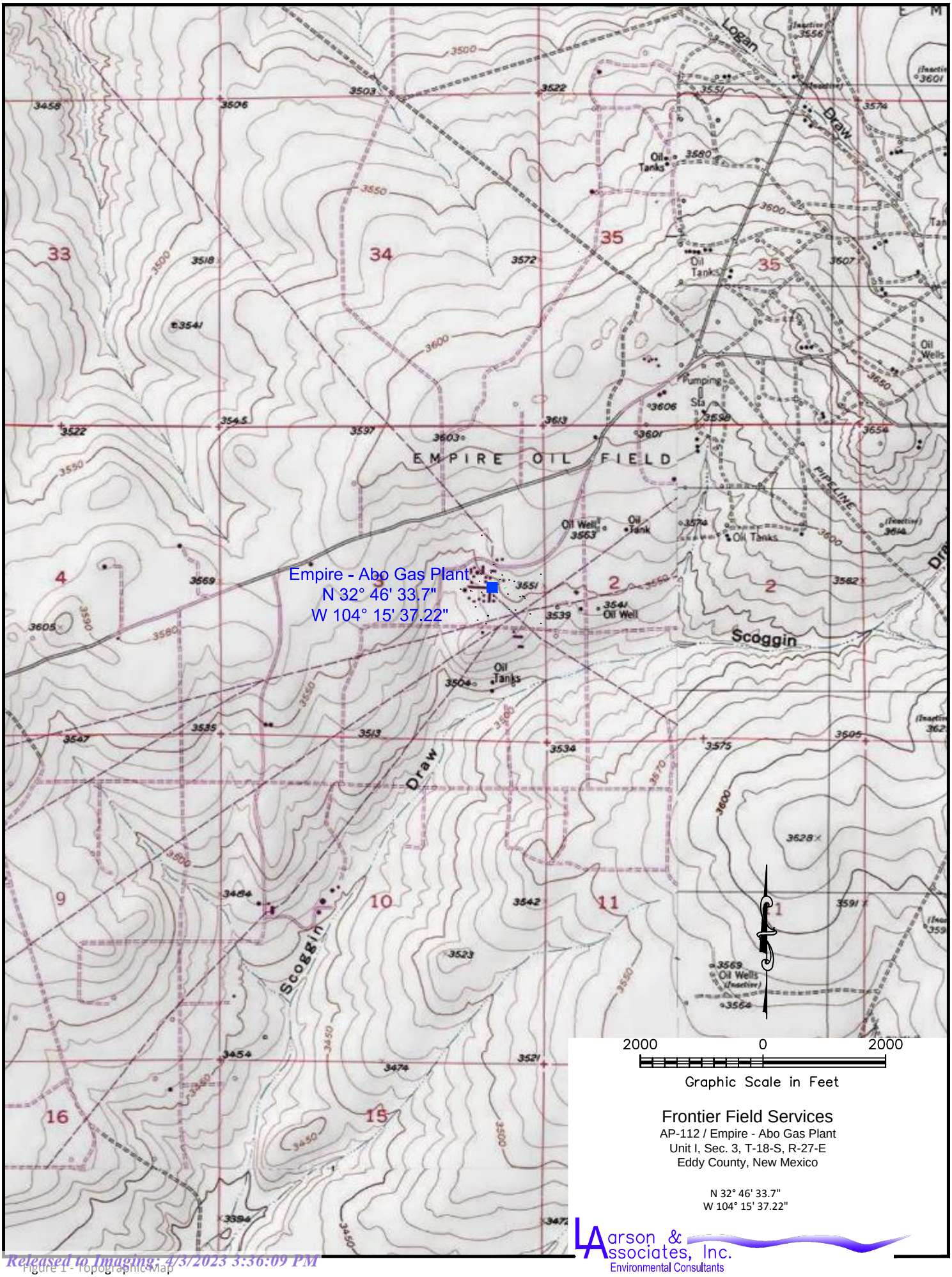
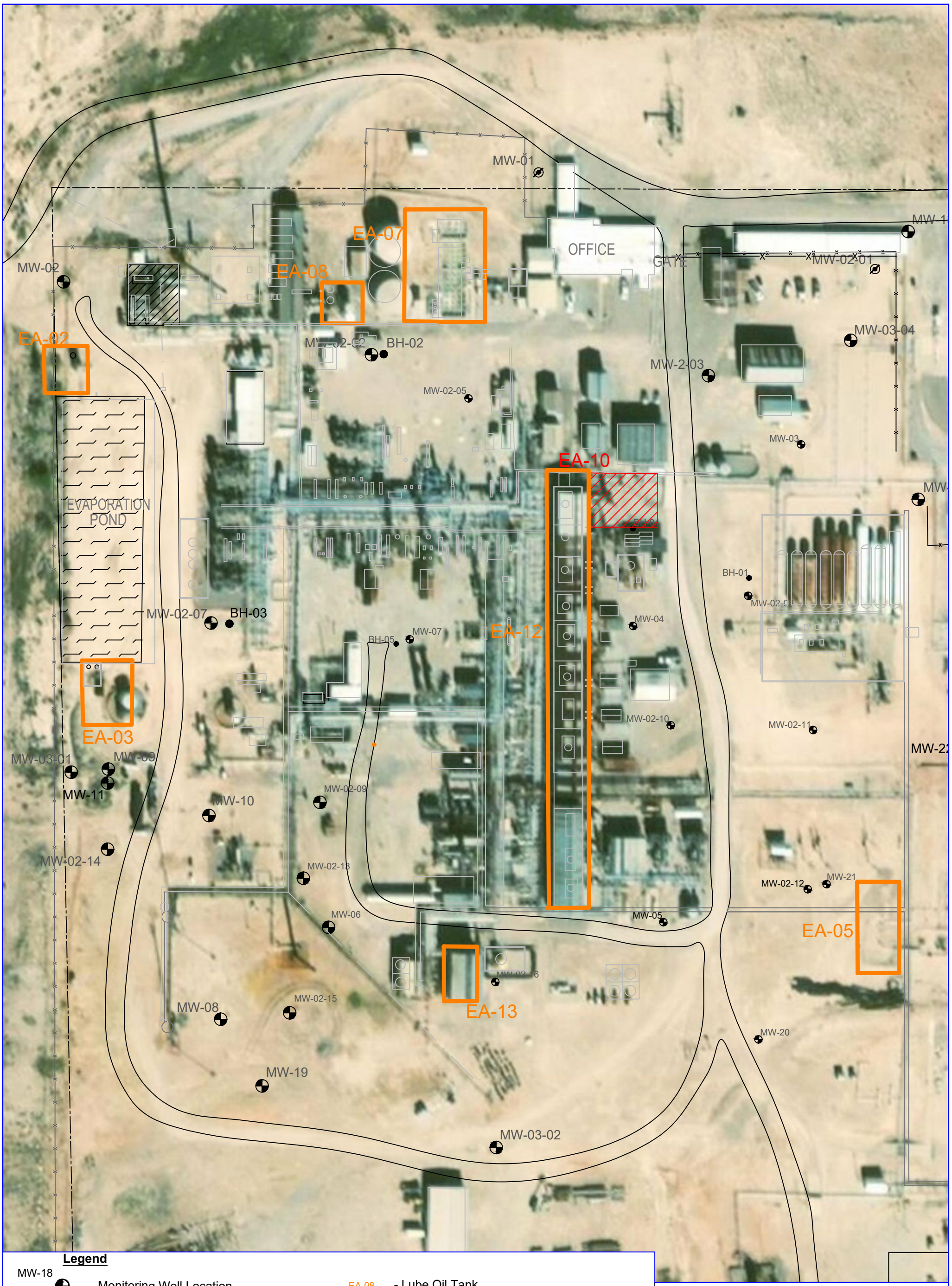


Figure 1 - Topographic Map



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Figure 2- Aerial Map

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Figure 3a - Wastewater Tanks (EA-02)

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Figure 3b - Anime Sump (EA-03)

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MW-21

MW-02-12

05-05

05-03

05-01

05-04

05-02

GAS

Legend

MW-09 - Monitoring Well Location

05-02 - Soil Boring Location

MW-01 - Plugged and Abandoned Monitoring Well

GAS - Gas Pipeline

P-01 - Piezometer (Fluid Level) Location

20 0 20

Graphic Scale in Feet

Frontier Field Services, LLC

AP - 112 / Empire - Abo Compressor Station

Unit I, (NE/4, SE/4)- 18 - S, R - 27 - E

Eddy County, New Mexico

32° 46' 30.02"N,

104° 15' 33.33"W

Larson & Associates, Inc.

Environmental Consultants

Figure 3c - Slop Oil Tanks (EA-05)

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MW-01

07-04

07-03

07-05

07-02

07-06

07-01

BH-02

Legend

MW-09 - Monitoring Well Location

MW-01 - Plugged and Abandoned Monitoring Well

P-01 - Piezometer (Fluid Level) Location

EA-7 SW - Soil Boring Location

20 0 20

Graphic Scale in Feet

Frontier Field Services, LLC
AP - 112 / Empire - Abo Compressor Station
Unit I, (NE/4, SE/4)- 18 - S, R - 27 - E
Eddy County, New Mexico
32° 46' 33.7"N
104° 15' 37.22"W

Larson & Associates, Inc.
Environmental Consultants

Figure 3d - Cooling Tower (EA-07)

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Figure 3e - Lube Oil Tank (EA-08)

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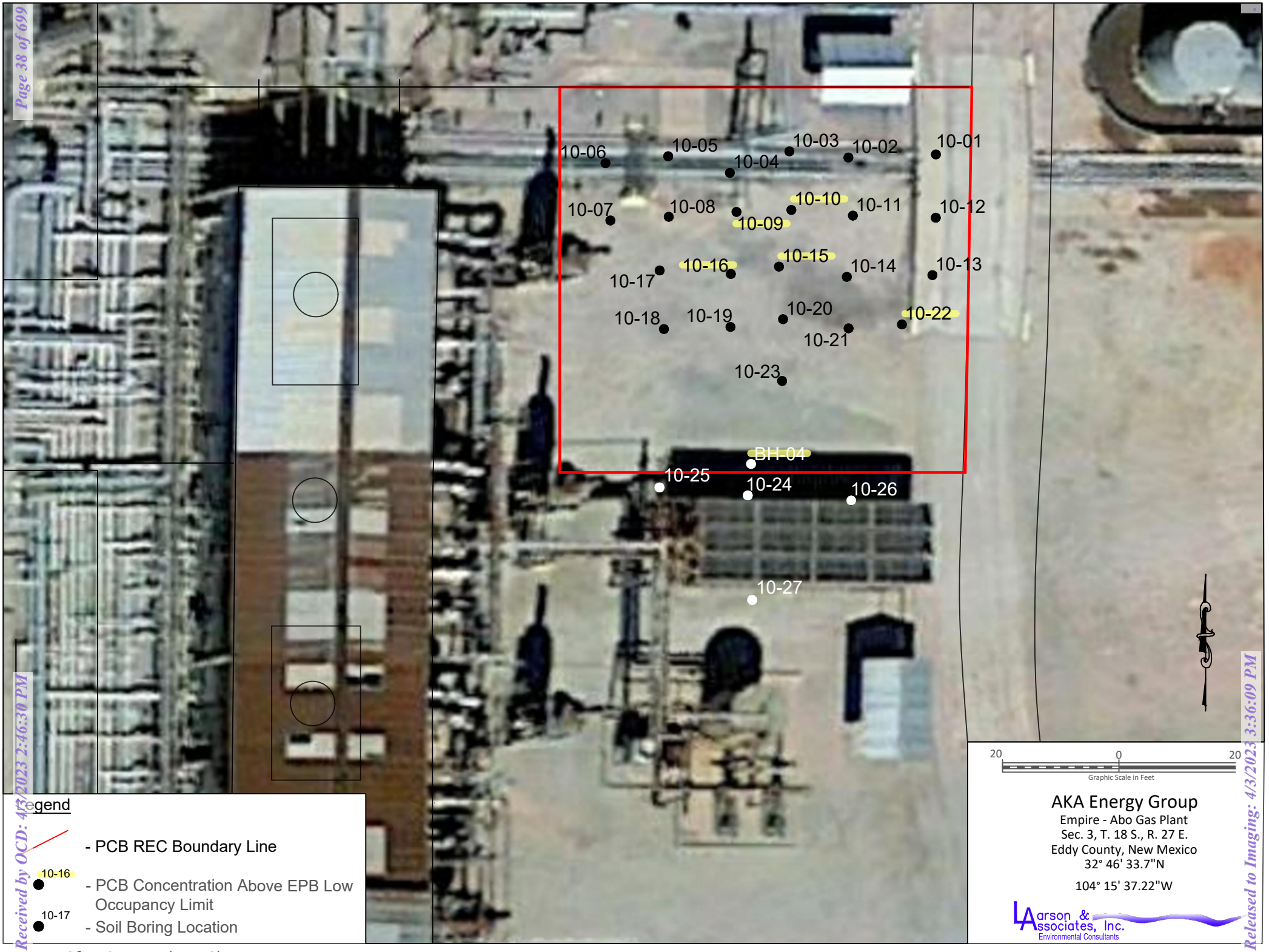
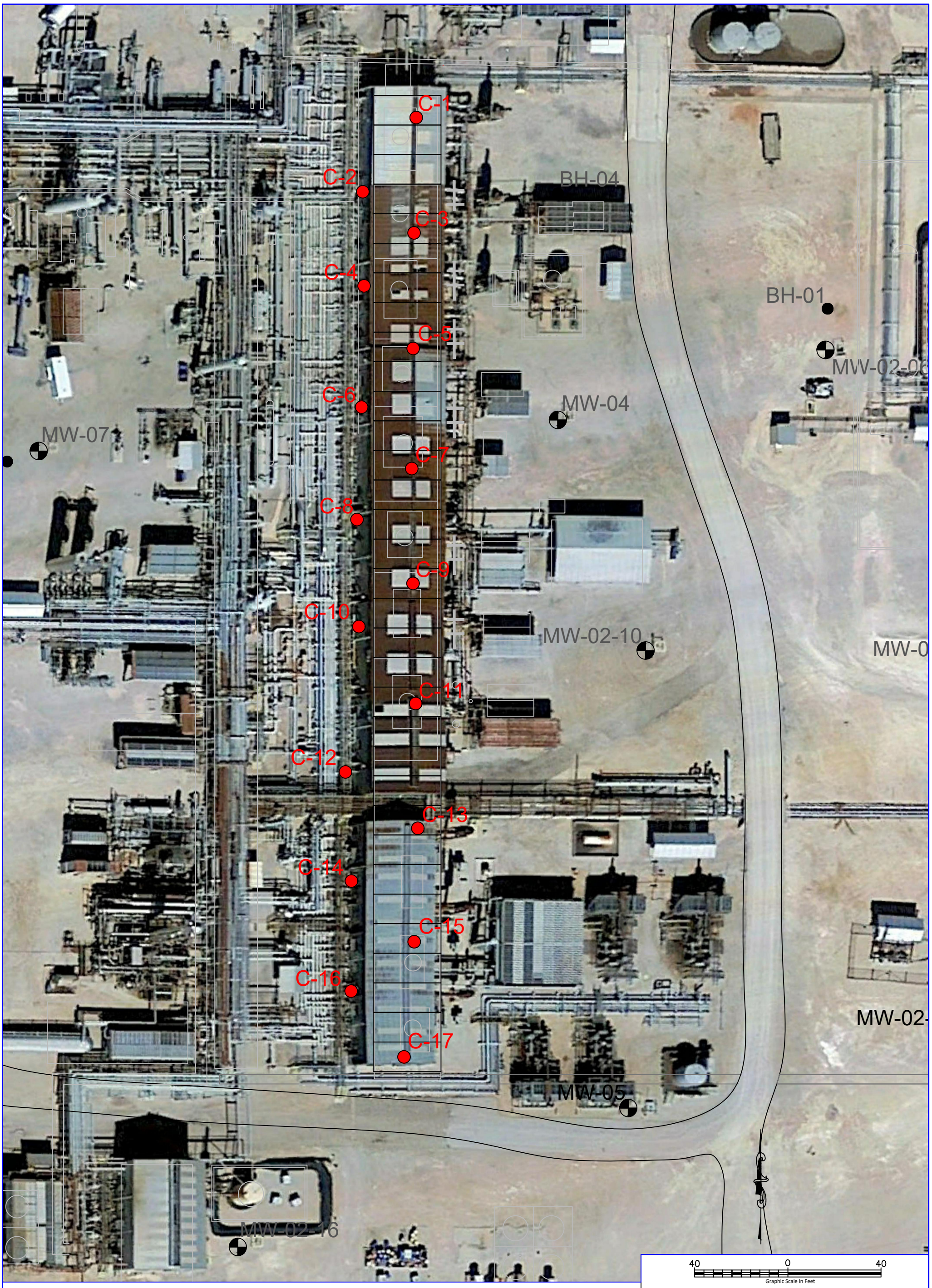


Figure 3f - PCB Area (EA-10)

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Legend

MW-10 - Monitoring Well Location

MW-01 - Plugged and Abandoned Monitoring Well

C-1 - Soil Boring Location

Fence

Property Line

Draw

Road

Clark Building - Soil Samples
AP - 112 / Empire - Abo Gas Plant
Unit I, (NE/4, SE/4)- 18 - S, R - 27 - E
Eddy County, New Mexico
32° 46' 33.7"N
104° 15' 37.22"W

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Figure 3g - Main Compressor (Clark) Building (EA-12)

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MW-06

13-01

MW-02-16

V-02-16

Legend

MW-09 - Monitoring Well Location

MW-01 - Plugged and Abandoned Monitoring Well

P-01 - Piezometer (Fluid Level) Location

13-01 - Soil Boring Location

20 0 20

Graphic Scale in Feet

Frontier Field Services, LLC
AP - 112 / Empire - Abo Compressor Station
Unit I, (NE/4, SE/4)- 18 - S, R - 27 - E
Eddy County, New Mexico
32° 46' 33.7"N
104° 15' 37.22"W

Larson & Associates, Inc.
Environmental Consultants

Figure 3h - Compressor (Engine 9) Building (EA-13)

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Figure 4a - Wastewater Tanks (EA-02) Showing Proposed Remediation Area

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Legend

MW-09 - Monitoring Well Location

MW-01 - Plugged and Abandoned Monitoring Well

P-01 - Piezometer (Fluid Level) Location

03-03 - Soil Boring Location

- Proposed Remediation Area

10 0 10

Graphic Scale in Feet

Frontier Field Services, LLC
AP - 112 / Empire - Abo Compressor Station
Unit I, (NE/4, SE/4)- 18 - S, R - 27 - E
Eddy County, New Mexico
32° 46' 32.72"N,
104° 15' 43.15"W

Larson & Associates, Inc.
Environmental Consultants

Figure 4b - Anime Sump (EA-03) Showing Proposed Remediation Area

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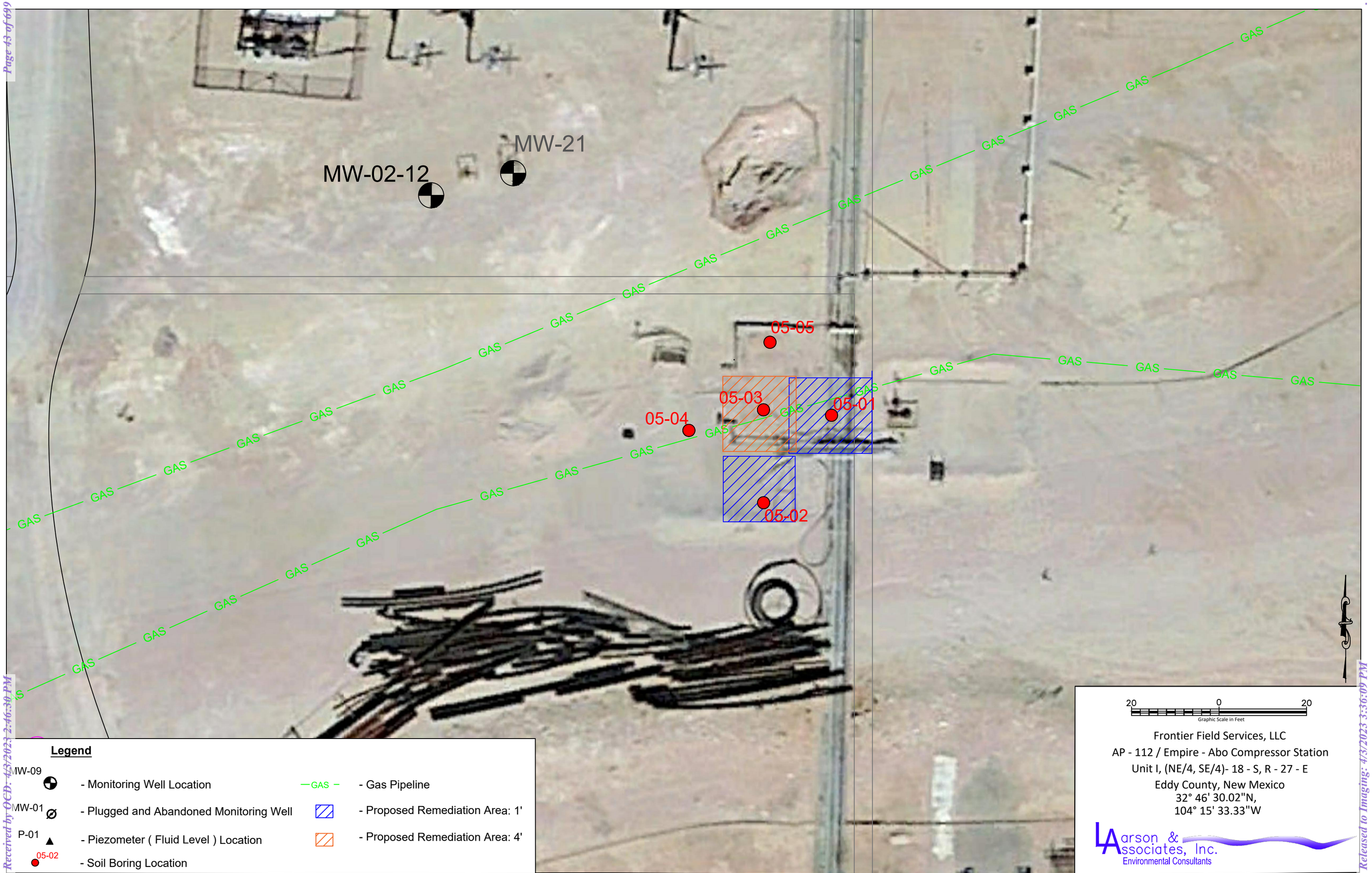


Figure 4c - Slop Oil Tanks (EA-05) Showing Proposed Remediation Area

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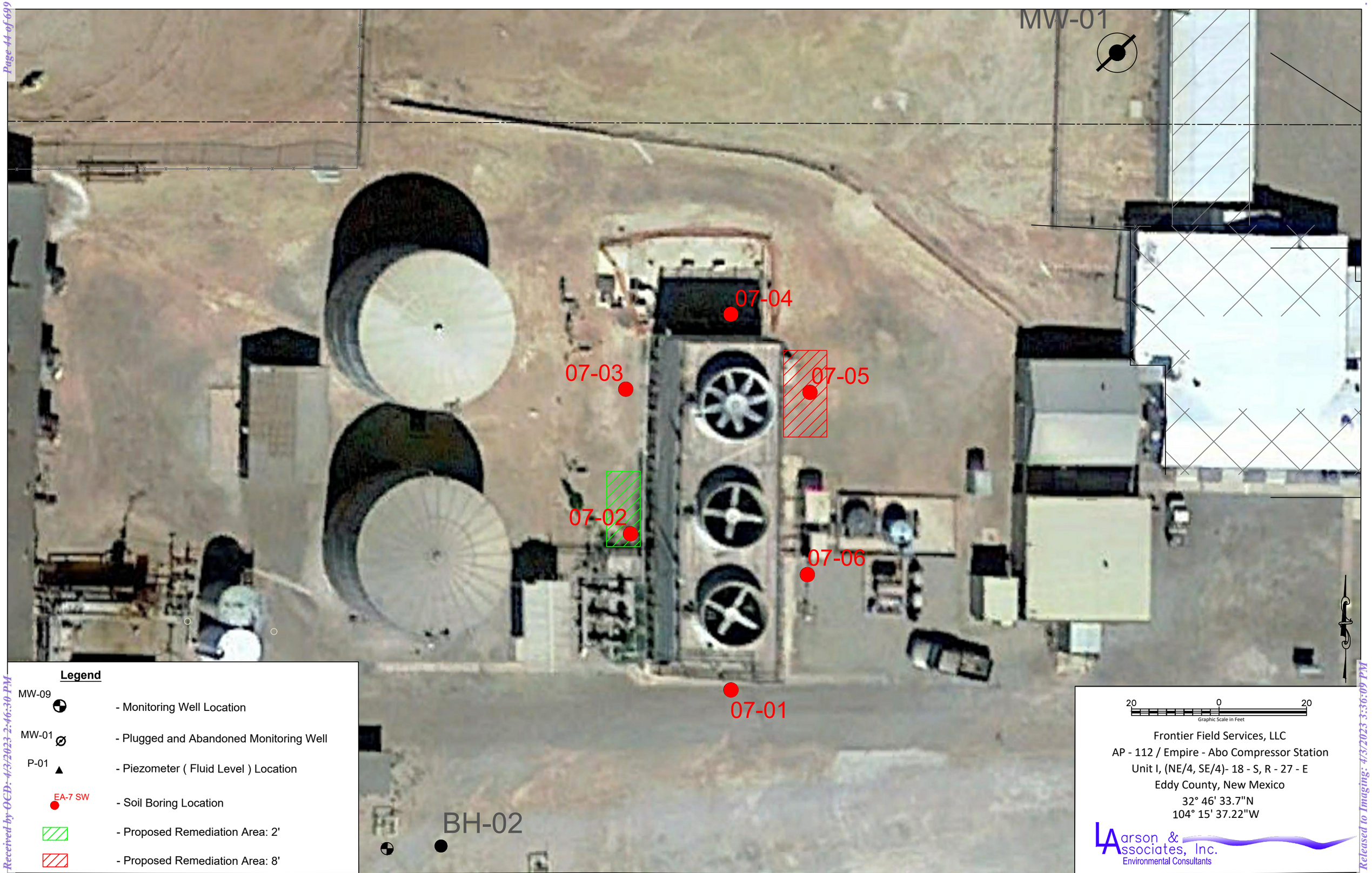
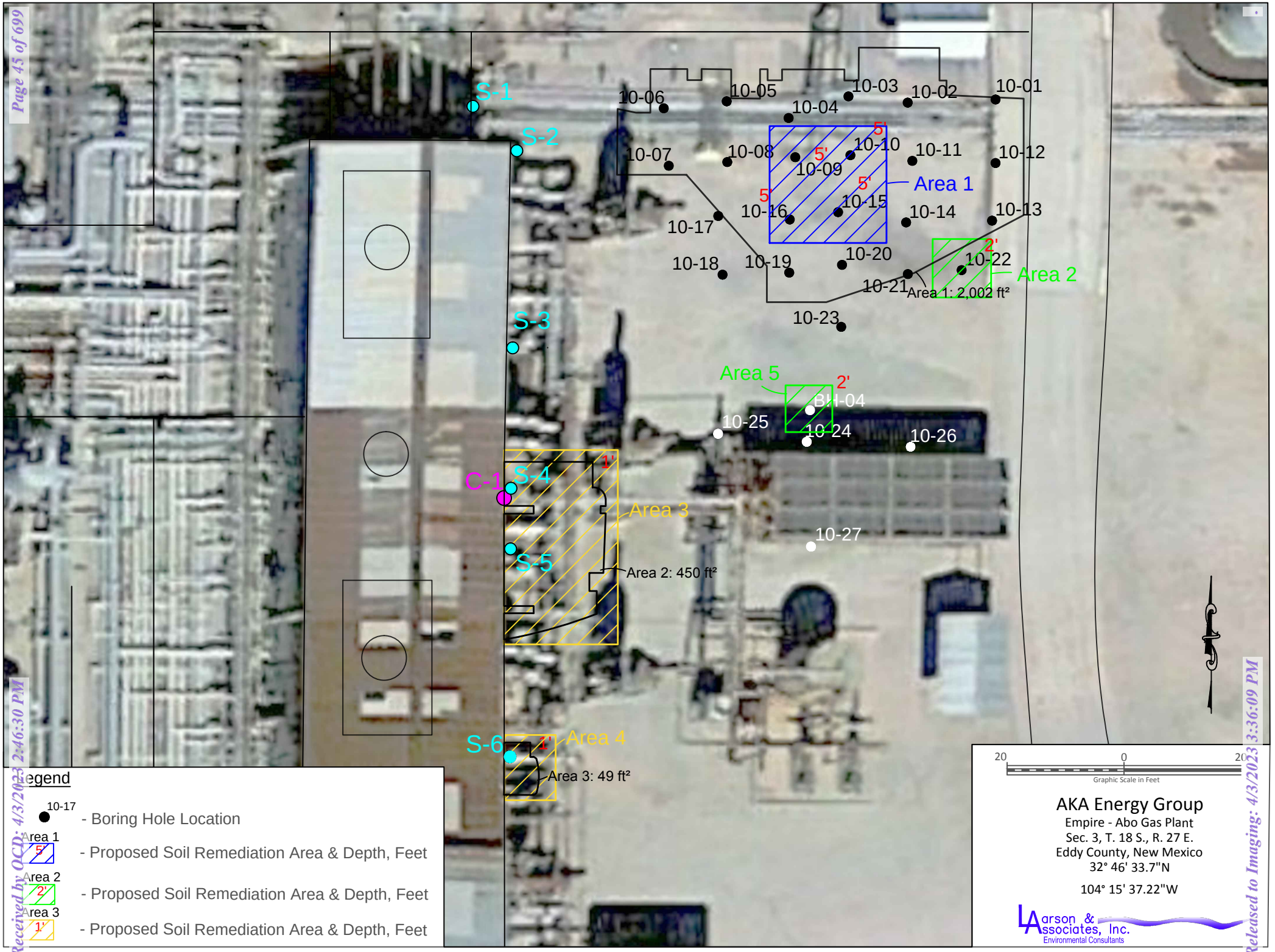


Figure 4d - Cooling Tower (EA-07) Showing Proposed Remediation Areas

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Legend

10-17 - Boring Hole Location

Area 1 (5') - Proposed Soil Remediation Area & Depth, Feet

Area 2 (2') - Proposed Soil Remediation Area & Depth, Feet

Area 3 (1') - Proposed Soil Remediation Area & Depth, Feet

20 0 20

Graphic Scale in Feet

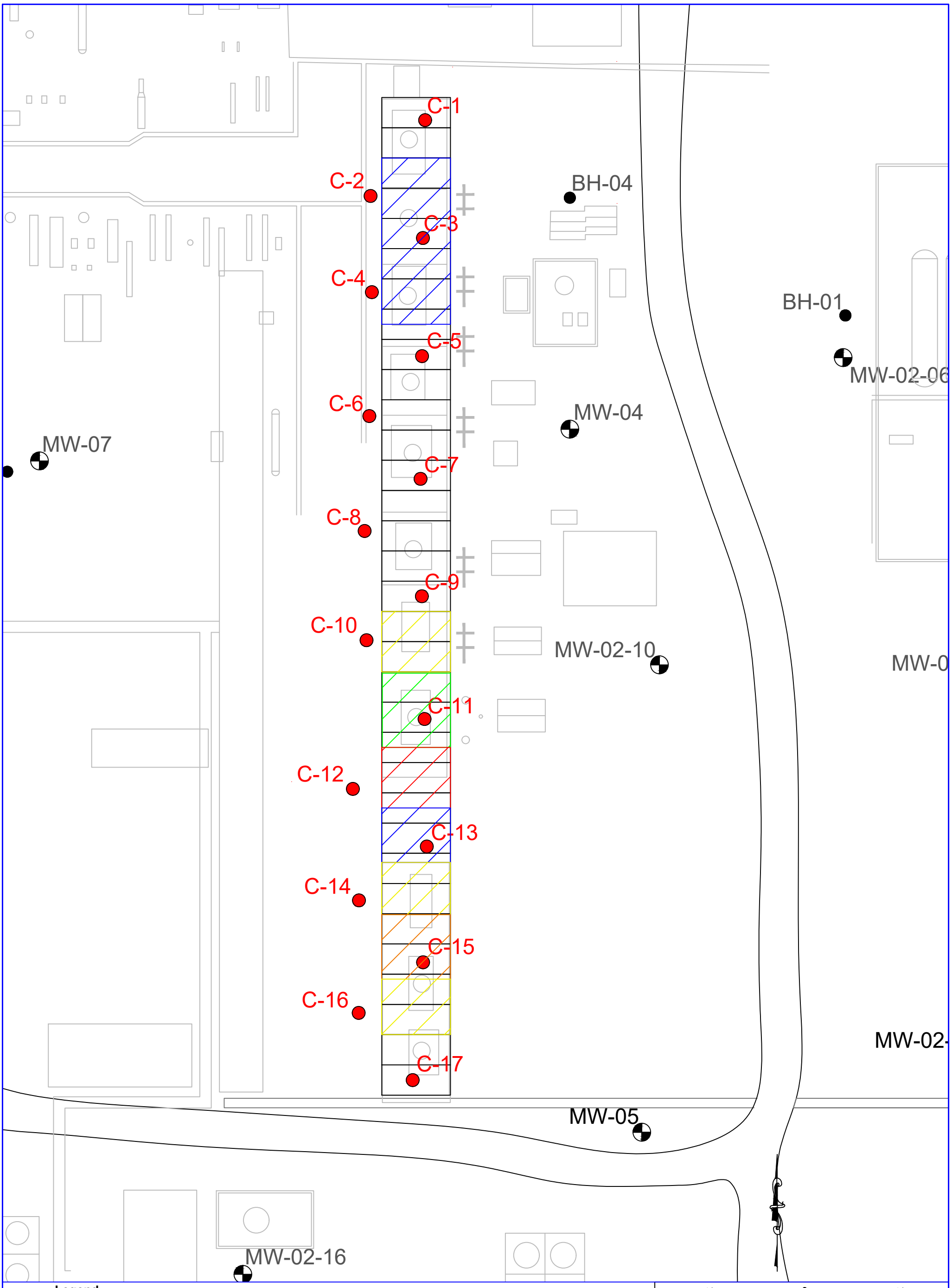
AKA Energy Group
Empire - Abo Gas Plant
Sec. 3, T. 18 S., R. 27 E.
Eddy County, New Mexico
32° 46' 33.7"N
104° 15' 37.22"W

Larson & Associates, Inc.
Environmental Consultants

Figure 4e - Aerial Map Showing PCB Soil Remediation Areas

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Figure 4g - Main Compressor (Clark) Building (EA-12) Showing Remediation Area

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MW-06

13-01

MW-02-16

-02-15

GAS

GAS

GAS

Legend

MW-09 - Monitoring Well Location

MW-01 - Plugged and Abandoned Monitoring Well

P-01 - Piezometer (Fluid Level) Location

13-01 - Soil Boring Location

- Proposed Remediation Area: 5'

20 0 20

Graphic Scale in Feet

Frontier Field Services, LLC
AP - 112 / Empire - Abo Compressor Station
Unit I, (NE/4, SE/4)- 18 - S, R - 27 - E
Eddy County, New Mexico
32° 46' 33.7"N
104° 15' 37.22"W

LArson & Associates, Inc.
Environmental Consultants

Figure 4h - Compressor (Engine 9) Building (EA-13) Showing Proposed Remediation Area

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Appendix A

Laboratory Reports

August 19, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1907385

RE: AKA Energy/Empire ABO

Dear Mark Larson:

DHL Analytical, Inc. received 36 sample(s) on 7/30/2019 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

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

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№ 0128

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants

507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 7-26-2019 PAGE 1 OF 3

PO#: LAB WORK ORDER#: 1907385

PROJECT LOCATION OR NAME: AKA Energy / Empire SDO

LAI PROJECT #: 9-0141-11 COLLECTOR: RN/ML

Data Reported to: Mark Larson

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: Mtn/NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESSERVED

ANALYSES: BTEX ☐ MTBE ☐ | TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☐ | DIESEL - MOD 8015 ☐ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDE ☒ ANIONS ☐ ALKALINITY ☐ | 8015M

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	FIELD NOTES
08-03-0-2	01	7/26/19	07:55	S	1				X		
08-03-2.5-3	02		08:00		1						
08-03-5-5	03		08:02		1						
08-03-7.5-8	04		08:05		1						
08-03-10-10.5	05		08:10		1						Cancel Hold per M. Larson 7/30/19
08-04-0-2	06		08:20		1						
08-04-2.5-3	07		08:23		1						
08-04-5-5	25 08		08:27		1						
08-04-7.5-8	09		08:32		1						
08-04-10-10.5	10		08:35		1						
07-01-0-2	11		08:55		1						
07-01-2.5-3	12		08:57		1						
07-01-5-5.5	13		09:00		1						
07-01-7.5-7.75	14		09:05		1						
07-01-10-11	15	↓	09:06	↓	1				↓		
TOTAL											

RELINQUISHED BY:(Signature)	DATE/TIME 7/29/19 16:30	RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature)	DATE/TIME 7/30/19 0845	RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)

LABORATORY: DHL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY: 7/30/19
RECEIVING TEMP: 5.9 3.5°C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

№ 0129

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants

507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 7-26-2019 PAGE 2 OF 3
PO#: LAB WORK ORDER#: 1907385
PROJECT LOCATION OR NAME: AKA Energy/Empire Abo
LAI PROJECT #: 19-0141-11 COLLECTOR: MW/ML

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: Mtn/NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	Hold	FIELD NOTES
07-02-0-2	16	7/26/19	09:25	S	1				X				
07-02-2.5-2.75	17		09:28		1								
07-02-5-5.25	18		09:31		1								
07-02-7.5-7.75	19		09:37		1								
07-02-10-10.25	20		09:40		1								
07-03-0-2	21		09:58		1								
07-03-2.5-2.75	22		10:02		1								
07-03-5-6	23		10:05		1								
07-03-7.5-7.75	24		10:10		1								
07-03-10-10.25	25		10:15		1								
07-04-0-2	26		10:32		1								
07-04-2.5-4	27		10:37		1								
07-04-5.0-5.5	28		10:40		1								
07-04-7.5-7.75	29		10:43		1								
07-04-10-11	30	↓	10:47	↓	1				↓				
TOTAL													

RELINQUISHED BY:(Signature)	DATE/TIME 7/29/19 16:30	RECEIVED BY: (Signature)	
RELINQUISHED BY:(Signature)	DATE/TIME 7/30/19 0845	RECEIVED BY: (Signature)	
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)	
LABORATORY: DHL			

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 3.5C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

Nº 0130

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 7-26-2019 PAGE 3 OF 3

PO#: LAB WORK ORDER#: 1907385

PROJECT LOCATION OR NAME: DAA Energy / Empire Abo

LAI PROJECT #: 19-0141-11 COLLECTOR: BN / ML

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: Min/NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
07-05-0-2	31	7/26/19	11:00	S	1				X			
07-05-2.5-3	32		11:04		1							
07-05-5-6	33		11:07		1							
07-06-0-2	34		11:33		1							
07-06-2.5-3.5	35		11:35		1							
07-06-5-5.25	36	↓	11:40	↓	1							
←									End		→	
TOTAL					36							

ANALYSES: BTEX ☐ MTBE ☐ TPH 1005 ☐ TPH 1006 ☐ TRPH 418.1 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8082 PCBS ☐ 8151 HERBICIDES ☐ TBLP - METALS (RCRA) ☐ TCLP VOC ☐ TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ TOTAL METALS (RCRA) ☐ OTHER LIST ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDES ☐ ANIONS ☐ ALKALINITY ☐ Hold

RELINQUISHED BY:(Signature) DATE/TIME 7/29/19 16:30 RECEIVED BY: (Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 7/30/19 0845 RECEIVED BY: (Signature) Jade Winer

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

LABORATORY: DHL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 3.5°C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates Date Received: 7/30/2019

Work Order Number 1907385 Received by JW

Checklist completed by: _____ 7/30/2019 Reviewed by _____ 7/30/2019
Signature Date Initials Date

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	3.5 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

DHL Analytical, Inc. **Date:** *19-Aug-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1907385

CASE NARRATIVE

Sample was analyzed using the methods outlined in the following references:

Method SW9056A - Anions Analysis
Method SW6020A - Metals Analysis
Method SW7471B - Mercury Analysis
Method CWG/1005 - Total Petroleum Hydrocarbons Analysis
Method D2216 - Percent Moisture Analysis

LOG IN

The samples were received and log-in performed on 7/30/19. A total of 36 samples were received. For further login notes please refer to the Chain-of-Custody. The samples arrived in good condition and were properly packaged.

METALS ANALYSIS

For Metals analysis performed on 8/1/19 (batches 92056 & 92063) the matrix spikes and/or matrix spike duplicate recoveries were out of control limits for Arsenic or Barium. In addition, the matrix spike and matrix spike duplicate (batch 92063) had the RPD above control limits for Barium. These are flagged accordingly in the QC summary report. The reference sample selected for the matrix spike and matrix spike duplicate (batch 92056) was from this work order. The reference sample selected for the matrix spike and matrix spike duplicate (batch 92063) was not from this work order. The LCSs were within control limits for these analytes. No further corrective actions were taken.

For Metals analysis performed on 8/1/19 (batches 92056 & 92063) the RPDs for the serial dilutions were above control limits for a total of three analytes. These are flagged accordingly. The PDSs were within control limits for these analytes. No further corrective actions were taken.

ANIONS ANALYSIS

For Anions analysis performed on 8/5/19 (batches 92075 & 92090) the sample and sample duplicates had the RPDs above control limits for Chloride. This was due to matrix effect. These are flagged accordingly in the QC summary report. The reference sample selected for the matrix spike and matrix spike duplicate (batch 92075) was not from this work order. The reference sample selected for the matrix spike and matrix spike duplicate (batch 92090) was from this work order. The LCSs were within control limits for this analyte. No further corrective actions were taken.

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1907385

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1907385-01	08-03-0-2		07/26/19 07:55 AM	7/30/2019
1907385-02	08-03-2.5-4		07/26/19 08:00 AM	7/30/2019
1907385-03	08-03-5-6		07/26/19 08:02 AM	7/30/2019
1907385-04	08-03-7.5-8		07/26/19 08:05 AM	7/30/2019
1907385-05	08-03-10-10.5		07/26/19 08:10 AM	7/30/2019
1907385-06	08-04-0-2		07/26/19 08:20 AM	7/30/2019
1907385-07	08-04-2.5-3		07/26/19 08:23 AM	7/30/2019
1907385-08	08-04-5-5.25		07/26/19 08:27 AM	7/30/2019
1907385-09	08-04-7.5-8		07/26/19 08:32 AM	7/30/2019
1907385-10	08-04-10-10.5		07/26/19 08:35 AM	7/30/2019
1907385-11	07-01-0-2		07/26/19 08:55 AM	7/30/2019
1907385-12	07-01-2.5-3		07/26/19 08:57 AM	7/30/2019
1907385-13	07-01-5-5.5		07/26/19 09:00 AM	7/30/2019
1907385-14	07-01-7.5-7.75		07/26/19 09:05 AM	7/30/2019
1907385-15	07-01-10-11		07/26/19 09:08 AM	7/30/2019
1907385-16	07-02-0-2		07/26/19 09:25 AM	7/30/2019
1907385-17	07-02-2.5-2.75		07/26/19 09:28 AM	7/30/2019
1907385-18	07-02-5-5.25		07/26/19 09:31 AM	7/30/2019
1907385-19	07-02-7.5-7.75		07/26/19 09:37 AM	7/30/2019
1907385-20	07-02-10-10.25		07/26/19 09:40 AM	7/30/2019
1907385-21	07-03-0-2		07/26/19 09:58 AM	7/30/2019
1907385-22	07-03-2.5-2.75		07/26/19 10:02 AM	7/30/2019
1907385-23	07-03-5-6		07/26/19 10:05 AM	7/30/2019
1907385-24	07-03-7.5-7.75		07/26/19 10:10 AM	7/30/2019
1907385-25	07-03-10-10.25		07/26/19 10:15 AM	7/30/2019
1907385-26	07-04-0-2		07/26/19 10:32 AM	7/30/2019
1907385-27	07-04-2.5-4		07/26/19 10:37 AM	7/30/2019
1907385-28	07-04-5.0-5.5		07/26/19 10:40 AM	7/30/2019
1907385-29	07-04-7.5-7.75		07/26/19 10:43 AM	7/30/2019
1907385-30	07-04-10-11		07/26/19 10:47 AM	7/30/2019
1907385-31	07-05-0-2		07/26/19 11:00 AM	7/30/2019
1907385-32	07-05-2.5-3		07/26/19 11:04 AM	7/30/2019
1907385-33	07-05-5-6		07/26/19 11:07 AM	7/30/2019
1907385-34	07-06-0-2		07/26/19 11:33 AM	7/30/2019
1907385-35	07-06-2.5-3.5		07/26/19 11:35 AM	7/30/2019
1907385-36	07-06-5-5.25		07/26/19 11:40 AM	7/30/2019

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DHL Analytical, Inc.

19-Aug-19

Lab Order: 1907385
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907385-01A	08-03-0-2	07/26/19 07:55 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-03-0-2	07/26/19 07:55 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907385-02A	08-03-2.5-4	07/26/19 08:00 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-03-2.5-4	07/26/19 08:00 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907385-03A	08-03-5-6	07/26/19 08:02 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-03-5-6	07/26/19 08:02 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190
1907385-04A	08-03-7.5-8	07/26/19 08:05 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-03-7.5-8	07/26/19 08:05 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190
1907385-05A	08-03-10-10.5	07/26/19 08:10 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-03-10-10.5	07/26/19 08:10 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190
1907385-06A	08-04-0-2	07/26/19 08:20 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-04-0-2	07/26/19 08:20 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190
1907385-07A	08-04-2.5-3	07/26/19 08:23 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-04-2.5-3	07/26/19 08:23 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190
1907385-08A	08-04-5-5.25	07/26/19 08:27 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-04-5-5.25	07/26/19 08:27 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190
1907385-09A	08-04-7.5-8	07/26/19 08:32 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-04-7.5-8	07/26/19 08:32 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190
1907385-10A	08-04-10-10.5	07/26/19 08:35 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	08-04-10-10.5	07/26/19 08:35 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190
1907385-11A	07-01-0-2	07/26/19 08:55 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	07-01-0-2	07/26/19 08:55 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-01-0-2	07/26/19 08:55 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	07-01-0-2	07/26/19 08:55 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-12A	07-01-2.5-3	07/26/19 08:57 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	07-01-2.5-3	07/26/19 08:57 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-01-2.5-3	07/26/19 08:57 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	07-01-2.5-3	07/26/19 08:57 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056

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Received by OCD: 4/3/2023 2:46:30 PM

Lab Order: 1907385
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907385-13A	07-01-5-5.5	07/26/19 09:00 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-01-5-5.5	07/26/19 09:00 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-01-5-5.5	07/26/19 09:00 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	07-01-5-5.5	07/26/19 09:00 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-14A	07-01-7.5-7.75	07/26/19 09:05 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-01-7.5-7.75	07/26/19 09:05 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-01-7.5-7.75	07/26/19 09:05 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	07-01-7.5-7.75	07/26/19 09:05 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-16A	07-02-0-2	07/26/19 09:25 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-02-0-2	07/26/19 09:25 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-02-0-2	07/26/19 09:25 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	07-02-0-2	07/26/19 09:25 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-17A	07-02-2.5-2.75	07/26/19 09:28 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-02-2.5-2.75	07/26/19 09:28 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-02-2.5-2.75	07/26/19 09:28 AM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	07-02-2.5-2.75	07/26/19 09:28 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-18A	07-02-5-5.25	07/26/19 09:31 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-02-5-5.25	07/26/19 09:31 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-02-5-5.25	07/26/19 09:31 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-02-5-5.25	07/26/19 09:31 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-19A	07-02-7.5-7.75	07/26/19 09:37 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-02-7.5-7.75	07/26/19 09:37 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-02-7.5-7.75	07/26/19 09:37 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-02-7.5-7.75	07/26/19 09:37 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-21A	07-03-0-2	07/26/19 09:58 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-03-0-2	07/26/19 09:58 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-03-0-2	07/26/19 09:58 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-03-0-2	07/26/19 09:58 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056

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Received by OCD: 4/3/2023 2:46:30 PM

Lab Order: 1907385
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907385-22A	07-03-2.5-2.75	07/26/19 10:02 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-03-2.5-2.75	07/26/19 10:02 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-03-2.5-2.75	07/26/19 10:02 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-03-2.5-2.75	07/26/19 10:02 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-23A	07-03-5-6	07/26/19 10:05 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-03-5-6	07/26/19 10:05 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-03-5-6	07/26/19 10:05 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-03-5-6	07/26/19 10:05 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-24A	07-03-7.5-7.75	07/26/19 10:10 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-03-7.5-7.75	07/26/19 10:10 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-03-7.5-7.75	07/26/19 10:10 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-03-7.5-7.75	07/26/19 10:10 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-26A	07-04-0-2	07/26/19 10:32 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-04-0-2	07/26/19 10:32 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-04-0-2	07/26/19 10:32 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-04-0-2	07/26/19 10:32 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-27A	07-04-2.5-4	07/26/19 10:37 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-04-2.5-4	07/26/19 10:37 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-04-2.5-4	07/26/19 10:37 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-04-2.5-4	07/26/19 10:37 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-28A	07-04-5.0-5.5	07/26/19 10:40 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-04-5.0-5.5	07/26/19 10:40 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-04-5.0-5.5	07/26/19 10:40 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-04-5.0-5.5	07/26/19 10:40 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-29A	07-04-7.5-7.75	07/26/19 10:43 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-04-7.5-7.75	07/26/19 10:43 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-04-7.5-7.75	07/26/19 10:43 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-04-7.5-7.75	07/26/19 10:43 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056

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PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907385-31A	07-05-0-2	07/26/19 11:00 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-05-0-2	07/26/19 11:00 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-05-0-2	07/26/19 11:00 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-05-0-2	07/26/19 11:00 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-32A	07-05-2.5-3	07/26/19 11:04 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-05-2.5-3	07/26/19 11:04 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-05-2.5-3	07/26/19 11:04 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-05-2.5-3	07/26/19 11:04 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-33A	07-05-5-6	07/26/19 11:07 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-05-5-6	07/26/19 11:07 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/02/19 09:08 AM	92121
	07-05-5-6	07/26/19 11:07 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-05-5-6	07/26/19 11:07 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-34A	07-06-0-2	07/26/19 11:33 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-06-0-2	07/26/19 11:33 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/05/19 10:00 AM	92130
	07-06-0-2	07/26/19 11:33 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-06-0-2	07/26/19 11:33 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 08:44 AM	92056
1907385-35A	07-06-2.5-3.5	07/26/19 11:35 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-06-2.5-3.5	07/26/19 11:35 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/05/19 10:00 AM	92130
	07-06-2.5-3.5	07/26/19 11:35 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-06-2.5-3.5	07/26/19 11:35 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 11:05 AM	92063
1907385-36A	07-06-5-5.25	07/26/19 11:40 AM	Soil	SW9056A	Anion Prep	08/05/19 08:35 AM	92090
	07-06-5-5.25	07/26/19 11:40 AM	Soil	SW7471B	Mercury Soil Prep, Total	08/05/19 10:00 AM	92130
	07-06-5-5.25	07/26/19 11:40 AM	Soil	D2216	Moisture Preparation	08/06/19 05:22 PM	92201
	07-06-5-5.25	07/26/19 11:40 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	07/31/19 11:05 AM	92063

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907385-01A	08-03-0-2	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-03-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 11:58 AM	GC12_190802A
1907385-02A	08-03-2.5-4	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-03-2.5-4	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 12:07 PM	GC12_190802A
1907385-03A	08-03-5-6	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-03-5-6	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 08:06 AM	GC12_190807A
1907385-04A	08-03-7.5-8	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-03-7.5-8	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 08:15 AM	GC12_190807A
1907385-05A	08-03-10-10.5	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-03-10-10.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 08:24 AM	GC12_190807A
1907385-06A	08-04-0-2	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-04-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 08:33 AM	GC12_190807A
1907385-07A	08-04-2.5-3	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-04-2.5-3	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 08:42 AM	GC12_190807A
1907385-08A	08-04-5-5.25	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-04-5-5.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 08:51 AM	GC12_190807A
1907385-09A	08-04-7.5-8	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-04-7.5-8	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 09:00 AM	GC12_190807A
1907385-10A	08-04-10-10.5	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	08-04-10-10.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 09:09 AM	GC12_190807A
1907385-11A	07-01-0-2	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 06:43 PM	IC2_190805A
	07-01-0-2	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	07-01-0-2	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:17 PM	CETAC2_HG_190802B
	07-01-0-2	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:25 PM	ICP-MS4_190801A
1907385-12A	07-01-2.5-3	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 06:59 PM	IC2_190805A
	07-01-2.5-3	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	07-01-2.5-3	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:20 PM	CETAC2_HG_190802B

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1907385-12A	07-01-2.5-3	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:27 PM	ICP-MS4_190801A
1907385-13A	07-01-5-5.5	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 09:39 PM	IC2_190805B
	07-01-5-5.5	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	07-01-5-5.5	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:22 PM	CETAC2_HG_190802B
	07-01-5-5.5	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:29 PM	ICP-MS4_190801A
1907385-14A	07-01-7.5-7.75	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 09:55 PM	IC2_190805B
	07-01-7.5-7.75	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	07-01-7.5-7.75	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:24 PM	CETAC2_HG_190802B
	07-01-7.5-7.75	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:31 PM	ICP-MS4_190801A
1907385-16A	07-02-0-2	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 10:11 PM	IC2_190805B
	07-02-0-2	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	07-02-0-2	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:26 PM	CETAC2_HG_190802B
	07-02-0-2	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:33 PM	ICP-MS4_190801A
1907385-17A	07-02-2.5-2.75	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 10:27 PM	IC2_190805B
	07-02-2.5-2.75	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	07-02-2.5-2.75	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:29 PM	CETAC2_HG_190802B
	07-02-2.5-2.75	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:35 PM	ICP-MS4_190801A
1907385-18A	07-02-5-5.25	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 10:43 PM	IC2_190805B
	07-02-5-5.25	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-02-5-5.25	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:31 PM	CETAC2_HG_190802B
	07-02-5-5.25	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:37 PM	ICP-MS4_190801A
1907385-19A	07-02-7.5-7.75	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 10:59 PM	IC2_190805B
	07-02-7.5-7.75	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-02-7.5-7.75	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:42 PM	CETAC2_HG_190802B
	07-02-7.5-7.75	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:39 PM	ICP-MS4_190801A

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907385-21A	07-03-0-2	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 11:15 PM	IC2_190805B
	07-03-0-2	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-03-0-2	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:44 PM	CETAC2_HG_190802B
	07-03-0-2	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:41 PM	ICP-MS4_190801A
1907385-22A	07-03-2.5-2.75	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 11:31 PM	IC2_190805B
	07-03-2.5-2.75	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-03-2.5-2.75	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:47 PM	CETAC2_HG_190802B
	07-03-2.5-2.75	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:59 PM	ICP-MS4_190801A
1907385-23A	07-03-5-6	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/05/19 11:47 PM	IC2_190805B
	07-03-5-6	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-03-5-6	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:54 PM	CETAC2_HG_190802B
	07-03-5-6	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:01 PM	ICP-MS4_190801A
1907385-24A	07-03-7.5-7.75	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 12:03 AM	IC2_190805B
	07-03-7.5-7.75	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-03-7.5-7.75	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:56 PM	CETAC2_HG_190802B
	07-03-7.5-7.75	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:03 PM	ICP-MS4_190801A
1907385-26A	07-04-0-2	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 01:39 AM	IC2_190805B
	07-04-0-2	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-04-0-2	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 01:58 PM	CETAC2_HG_190802B
	07-04-0-2	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:05 PM	ICP-MS4_190801A
1907385-27A	07-04-2.5-4	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 01:55 AM	IC2_190805B
	07-04-2.5-4	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-04-2.5-4	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 02:00 PM	CETAC2_HG_190802B
	07-04-2.5-4	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 12:21 PM	ICP-MS4_190801A
1907385-28A	07-04-5.0-5.5	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 02:11 AM	IC2_190805B

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907385-28A	07-04-5.0-5.5	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-04-5.0-5.5	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 02:03 PM	CETAC2_HG_190802B
	07-04-5.0-5.5	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:07 PM	ICP-MS4_190801A
1907385-29A	07-04-7.5-7.75	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 02:27 AM	IC2_190805B
	07-04-7.5-7.75	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-04-7.5-7.75	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 02:05 PM	CETAC2_HG_190802B
	07-04-7.5-7.75	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:09 PM	ICP-MS4_190801A
1907385-31A	07-05-0-2	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 02:43 AM	IC2_190805B
	07-05-0-2	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-05-0-2	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 02:07 PM	CETAC2_HG_190802B
	07-05-0-2	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:11 PM	ICP-MS4_190801A
1907385-32A	07-05-2.5-3	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 02:59 AM	IC2_190805B
	07-05-2.5-3	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-05-2.5-3	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 02:09 PM	CETAC2_HG_190802B
	07-05-2.5-3	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:13 PM	ICP-MS4_190801A
1907385-33A	07-05-5-6	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 03:15 AM	IC2_190805B
	07-05-5-6	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-05-5-6	Soil	SW7471B	Total Mercury: Soil/Solid	92121	1	08/02/19 02:12 PM	CETAC2_HG_190802B
	07-05-5-6	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:15 PM	ICP-MS4_190801A
1907385-34A	07-06-0-2	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 03:31 AM	IC2_190805B
	07-06-0-2	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-06-0-2	Soil	SW7471B	Total Mercury: Soil/Solid	92130	1	08/07/19 09:44 AM	CETAC2_HG_190807A
	07-06-0-2	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92056	5	08/01/19 01:17 PM	ICP-MS4_190801A
1907385-35A	07-06-2.5-3.5	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 03:47 AM	IC2_190805B
	07-06-2.5-3.5	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B

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Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907385-35A	07-06-2.5-3.5	Soil	SW7471B	Total Mercury: Soil/Solid	92130	1	08/07/19 09:47 AM	CETAC2_HG_190807A
	07-06-2.5-3.5	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92063	5	08/01/19 11:05 AM	ICP-MS4_190801A
1907385-36A	07-06-5-5.25	Soil	SW9056A	Anions by IC method - Soil	92090	10	08/06/19 04:03 AM	IC2_190805B
	07-06-5-5.25	Soil	D2216	Percent Moisture	92201	1	08/07/19 08:40 AM	PMOIST_190806B
	07-06-5-5.25	Soil	SW7471B	Total Mercury: Soil/Solid	92130	1	08/07/19 09:49 AM	CETAC2_HG_190807A
	07-06-5-5.25	Soil	SW6020A	Trace Metals: ICP-MS - Solid	92063	5	08/01/19 11:07 AM	ICP-MS4_190801A

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-03-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-01
Project No:	6-0141-11	**Collection Date:**	07/26/19 07:55 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.57	9.57	27.4		mg/Kg-dry	1	08/02/19 11:58 AM
TPH-DRO >C10-C28	<9.57	9.57	27.4		mg/Kg-dry	1	08/02/19 11:58 AM
TPH-ORO >C28-C35	<9.57	9.57	27.4		mg/Kg-dry	1	08/02/19 11:58 AM
T/R Hydrocarbons: C6-C35	<9.57	9.57	27.4		mg/Kg-dry	1	08/02/19 11:58 AM
Surr: Isopropylbenzene	78.4	0	70-130		%REC	1	08/02/19 11:58 AM
Surr: Octacosane	103	0	70-130		%REC	1	08/02/19 11:58 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	29.2	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-03-2.5-4
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-02
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:00 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.20	9.20	26.3		mg/Kg-dry	1	08/02/19 12:07 PM
TPH-DRO >C10-C28	<9.20	9.20	26.3		mg/Kg-dry	1	08/02/19 12:07 PM
TPH-ORO >C28-C35	<9.20	9.20	26.3		mg/Kg-dry	1	08/02/19 12:07 PM
T/R Hydrocarbons: C6-C35	<9.20	9.20	26.3		mg/Kg-dry	1	08/02/19 12:07 PM
Surr: Isopropylbenzene	77.7	0	70-130		%REC	1	08/02/19 12:07 PM
Surr: Octacosane	103	0	70-130		%REC	1	08/02/19 12:07 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	28.5	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-03-5-6
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-03
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:02 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.38	7.38	21.1		mg/Kg-dry	1	08/07/19 08:06 AM
TPH-DRO >C10-C28	<7.38	7.38	21.1		mg/Kg-dry	1	08/07/19 08:06 AM
TPH-ORO >C28-C35	<7.38	7.38	21.1		mg/Kg-dry	1	08/07/19 08:06 AM
T/R Hydrocarbons: C6-C35	<7.38	7.38	21.1		mg/Kg-dry	1	08/07/19 08:06 AM
Surr: Isopropylbenzene	96.2	0	70-130		%REC	1	08/07/19 08:06 AM
Surr: Octacosane	101	0	70-130		%REC	1	08/07/19 08:06 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	6.40	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-03-7.5-8
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-04
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:05 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.39	9.39	26.8		mg/Kg-dry	1	08/07/19 08:15 AM
TPH-DRO >C10-C28	<9.39	9.39	26.8		mg/Kg-dry	1	08/07/19 08:15 AM
TPH-ORO >C28-C35	<9.39	9.39	26.8		mg/Kg-dry	1	08/07/19 08:15 AM
T/R Hydrocarbons: C6-C35	<9.39	9.39	26.8		mg/Kg-dry	1	08/07/19 08:15 AM
Surr: Isopropylbenzene	98.1	0	70-130		%REC	1	08/07/19 08:15 AM
Surr: Octacosane	101	0	70-130		%REC	1	08/07/19 08:15 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	25.6	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-03-10-10.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-05
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:10 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.65	9.65	27.6		mg/Kg-dry	1	08/07/19 08:24 AM
TPH-DRO >C10-C28	<9.65	9.65	27.6		mg/Kg-dry	1	08/07/19 08:24 AM
TPH-ORO >C28-C35	<9.65	9.65	27.6		mg/Kg-dry	1	08/07/19 08:24 AM
T/R Hydrocarbons: C6-C35	<9.65	9.65	27.6		mg/Kg-dry	1	08/07/19 08:24 AM
Surr: Isopropylbenzene	97.5	0	70-130		%REC	1	08/07/19 08:24 AM
Surr: Octacosane	99.4	0	70-130		%REC	1	08/07/19 08:24 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	27.6	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-04-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-06
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:20 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.93	9.93	28.4		mg/Kg-dry	1	08/07/19 08:33 AM
TPH-DRO >C10-C28	<9.93	9.93	28.4		mg/Kg-dry	1	08/07/19 08:33 AM
TPH-ORO >C28-C35	<9.93	9.93	28.4		mg/Kg-dry	1	08/07/19 08:33 AM
T/R Hydrocarbons: C6-C35	<9.93	9.93	28.4		mg/Kg-dry	1	08/07/19 08:33 AM
Surr: Isopropylbenzene	97.8	0	70-130		%REC	1	08/07/19 08:33 AM
Surr: Octacosane	103	0	70-130		%REC	1	08/07/19 08:33 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	29.7	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-04-2.5-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-07
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:23 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.54	7.54	21.5		mg/Kg-dry	1	08/07/19 08:42 AM
TPH-DRO >C10-C28	<7.54	7.54	21.5		mg/Kg-dry	1	08/07/19 08:42 AM
TPH-ORO >C28-C35	<7.54	7.54	21.5		mg/Kg-dry	1	08/07/19 08:42 AM
T/R Hydrocarbons: C6-C35	<7.54	7.54	21.5		mg/Kg-dry	1	08/07/19 08:42 AM
Surr: Isopropylbenzene	102	0	70-130		%REC	1	08/07/19 08:42 AM
Surr: Octacosane	108	0	70-130		%REC	1	08/07/19 08:42 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	7.39	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-04-5-5.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-08
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:27 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.04	7.04	20.1		mg/Kg-dry	1	08/07/19 08:51 AM
TPH-DRO >C10-C28	<7.04	7.04	20.1		mg/Kg-dry	1	08/07/19 08:51 AM
TPH-ORO >C28-C35	<7.04	7.04	20.1		mg/Kg-dry	1	08/07/19 08:51 AM
T/R Hydrocarbons: C6-C35	<7.04	7.04	20.1		mg/Kg-dry	1	08/07/19 08:51 AM
Surr: Isopropylbenzene	98.7	0	70-130		%REC	1	08/07/19 08:51 AM
Surr: Octacosane	102	0	70-130		%REC	1	08/07/19 08:51 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	13.0	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-04-7.5-8
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-09
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:32 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.83	7.83	22.4		mg/Kg-dry	1	08/07/19 09:00 AM
TPH-DRO >C10-C28	<7.83	7.83	22.4		mg/Kg-dry	1	08/07/19 09:00 AM
TPH-ORO >C28-C35	<7.83	7.83	22.4		mg/Kg-dry	1	08/07/19 09:00 AM
T/R Hydrocarbons: C6-C35	<7.83	7.83	22.4		mg/Kg-dry	1	08/07/19 09:00 AM
Surr: Isopropylbenzene	101	0	70-130		%REC	1	08/07/19 09:00 AM
Surr: Octacosane	95.9	0	70-130		%REC	1	08/07/19 09:00 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.6	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-04-10-10.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-10
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:35 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.59	9.59	27.4		mg/Kg-dry	1	08/07/19 09:09 AM
TPH-DRO >C10-C28	<9.59	9.59	27.4		mg/Kg-dry	1	08/07/19 09:09 AM
TPH-ORO >C28-C35	<9.59	9.59	27.4		mg/Kg-dry	1	08/07/19 09:09 AM
T/R Hydrocarbons: C6-C35	<9.59	9.59	27.4		mg/Kg-dry	1	08/07/19 09:09 AM
Surr: Isopropylbenzene	104	0	70-130		%REC	1	08/07/19 09:09 AM
Surr: Octacosane	105	0	70-130		%REC	1	08/07/19 09:09 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	29.9	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-01-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-11
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:55 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	6.50	0.561	1.12		mg/Kg-dry	5	08/01/19 12:25 PM
Barium	120	0.561	2.24		mg/Kg-dry	5	08/01/19 12:25 PM
Cadmium	<0.112	0.112	0.337		mg/Kg-dry	5	08/01/19 12:25 PM
Chromium	42.8	0.561	2.24		mg/Kg-dry	5	08/01/19 12:25 PM
Lead	3.76	0.112	0.337		mg/Kg-dry	5	08/01/19 12:25 PM
Selenium	0.685	0.168	0.561		mg/Kg-dry	5	08/01/19 12:25 PM
Silver	<0.112	0.112	0.224		mg/Kg-dry	5	08/01/19 12:25 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0168	0.0168	0.0420		mg/Kg-dry	1	08/02/19 01:17 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	315	23.6	59.0		mg/Kg-dry	10	08/05/19 06:43 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	19.0	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-01-2.5-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-12
Project No:	6-0141-11	**Collection Date:**	07/26/19 08:57 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	<0.648	0.648	1.30		mg/Kg-dry	5	08/01/19 12:27 PM
Barium	3.28	0.648	2.59		mg/Kg-dry	5	08/01/19 12:27 PM
Cadmium	<0.130	0.130	0.389		mg/Kg-dry	5	08/01/19 12:27 PM
Chromium	3.58	0.648	2.59		mg/Kg-dry	5	08/01/19 12:27 PM
Lead	0.143	0.130	0.389	J	mg/Kg-dry	5	08/01/19 12:27 PM
Selenium	<0.194	0.194	0.648		mg/Kg-dry	5	08/01/19 12:27 PM
Silver	<0.130	0.130	0.259		mg/Kg-dry	5	08/01/19 12:27 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0191	0.0191	0.0479		mg/Kg-dry	1	08/02/19 01:20 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	40.2	28.2	70.4	J	mg/Kg-dry	10	08/05/19 06:59 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	29.9	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-01-5-5.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-13
Project No:	6-0141-11	**Collection Date:**	07/26/19 09:00 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	2.84	0.590	1.18		mg/Kg-dry	5	08/01/19 12:29 PM
Barium	121	0.590	2.36		mg/Kg-dry	5	08/01/19 12:29 PM
Cadmium	0.145	0.118	0.354	J	mg/Kg-dry	5	08/01/19 12:29 PM
Chromium	4.97	0.590	2.36		mg/Kg-dry	5	08/01/19 12:29 PM
Lead	0.824	0.118	0.354		mg/Kg-dry	5	08/01/19 12:29 PM
Selenium	<0.177	0.177	0.590		mg/Kg-dry	5	08/01/19 12:29 PM
Silver	<0.118	0.118	0.236		mg/Kg-dry	5	08/01/19 12:29 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0166	0.0166	0.0416		mg/Kg-dry	1	08/02/19 01:22 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	51.0	22.3	55.7	J	mg/Kg-dry	10	08/05/19 09:39 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	17.7	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-01-7.5-7.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-14
Project No:	6-0141-11	**Collection Date:**	07/26/19 09:05 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	12.6	0.660	1.32		mg/Kg-dry	5	08/01/19 12:31 PM
Barium	44.0	0.660	2.64		mg/Kg-dry	5	08/01/19 12:31 PM
Cadmium	0.196	0.132	0.396	J	mg/Kg-dry	5	08/01/19 12:31 PM
Chromium	19.1	0.660	2.64		mg/Kg-dry	5	08/01/19 12:31 PM
Lead	5.88	0.132	0.396		mg/Kg-dry	5	08/01/19 12:31 PM
Selenium	1.61	0.198	0.660		mg/Kg-dry	5	08/01/19 12:31 PM
Silver	<0.132	0.132	0.264		mg/Kg-dry	5	08/01/19 12:31 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	0.0451	0.0198	0.0495	J	mg/Kg-dry	1	08/02/19 01:24 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	70.4	26.9	67.3		mg/Kg-dry	10	08/05/19 09:55 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	27.2	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-02-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-16
Project No:	6-0141-11	**Collection Date:**	07/26/19 09:25 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	21.3	0.555	1.11		mg/Kg-dry	5	08/01/19 12:33 PM
Barium	138	0.555	2.22		mg/Kg-dry	5	08/01/19 12:33 PM
Cadmium	0.441	0.111	0.333		mg/Kg-dry	5	08/01/19 12:33 PM
Chromium	422	0.555	2.22		mg/Kg-dry	5	08/01/19 12:33 PM
Lead	26.0	0.111	0.333		mg/Kg-dry	5	08/01/19 12:33 PM
Selenium	1.26	0.166	0.555		mg/Kg-dry	5	08/01/19 12:33 PM
Silver	<0.111	0.111	0.222		mg/Kg-dry	5	08/01/19 12:33 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	0.0281	0.0184	0.0461	J	mg/Kg-dry	1	08/02/19 01:26 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	349	24.6	61.5		mg/Kg-dry	10	08/05/19 10:11 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	18.8	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-02-2.5-2.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-17
Project No:	6-0141-11	**Collection Date:**	07/26/19 09:28 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	1.27	0.671	1.34	J	mg/Kg-dry	5	08/01/19 12:35 PM
Barium	8.85	0.671	2.68		mg/Kg-dry	5	08/01/19 12:35 PM
Cadmium	<0.134	0.134	0.403		mg/Kg-dry	5	08/01/19 12:35 PM
Chromium	47.2	0.671	2.68		mg/Kg-dry	5	08/01/19 12:35 PM
Lead	1.39	0.134	0.403		mg/Kg-dry	5	08/01/19 12:35 PM
Selenium	<0.201	0.201	0.671		mg/Kg-dry	5	08/01/19 12:35 PM
Silver	<0.134	0.134	0.268		mg/Kg-dry	5	08/01/19 12:35 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0200	0.0200	0.0500		mg/Kg-dry	1	08/02/19 01:29 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<26.9	26.9	67.4		mg/Kg-dry	10	08/05/19 10:27 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	29.1	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-02-5-5.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-18
Project No:	6-0141-11	**Collection Date:**	07/26/19 09:31 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	4.80	0.545	1.09		mg/Kg-dry	5	08/01/19 12:37 PM
Barium	3.84	0.545	2.18		mg/Kg-dry	5	08/01/19 12:37 PM
Cadmium	0.189	0.109	0.327	J	mg/Kg-dry	5	08/01/19 12:37 PM
Chromium	4.30	0.545	2.18		mg/Kg-dry	5	08/01/19 12:37 PM
Lead	1.18	0.109	0.327		mg/Kg-dry	5	08/01/19 12:37 PM
Selenium	0.291	0.163	0.545	J	mg/Kg-dry	5	08/01/19 12:37 PM
Silver	<0.109	0.109	0.218		mg/Kg-dry	5	08/01/19 12:37 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0152	0.0152	0.0379		mg/Kg-dry	1	08/02/19 01:31 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	57.7	21.1	52.6		mg/Kg-dry	10	08/05/19 10:43 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	10.1	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-02-7.5-7.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-19
Project No:	6-0141-11	**Collection Date:**	07/26/19 09:37 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	<0.611	0.611	1.22		mg/Kg-dry	5	08/01/19 12:39 PM
Barium	6.72	0.611	2.44		mg/Kg-dry	5	08/01/19 12:39 PM
Cadmium	<0.122	0.122	0.367		mg/Kg-dry	5	08/01/19 12:39 PM
Chromium	4.91	0.611	2.44		mg/Kg-dry	5	08/01/19 12:39 PM
Lead	0.363	0.122	0.367	J	mg/Kg-dry	5	08/01/19 12:39 PM
Selenium	<0.183	0.183	0.611		mg/Kg-dry	5	08/01/19 12:39 PM
Silver	<0.122	0.122	0.244		mg/Kg-dry	5	08/01/19 12:39 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0180	0.0180	0.0451		mg/Kg-dry	1	08/02/19 01:42 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	31.6	23.8	59.5	J	mg/Kg-dry	10	08/05/19 10:59 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	19.8	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-03-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-21
Project No:	6-0141-11	**Collection Date:**	07/26/19 09:58 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	2.13	0.660	1.32		mg/Kg-dry	5	08/01/19 12:41 PM
Barium	24.5	0.660	2.64		mg/Kg-dry	5	08/01/19 12:41 PM
Cadmium	<0.132	0.132	0.396		mg/Kg-dry	5	08/01/19 12:41 PM
Chromium	68.4	0.660	2.64		mg/Kg-dry	5	08/01/19 12:41 PM
Lead	0.956	0.132	0.396		mg/Kg-dry	5	08/01/19 12:41 PM
Selenium	0.313	0.198	0.660	J	mg/Kg-dry	5	08/01/19 12:41 PM
Silver	<0.132	0.132	0.264		mg/Kg-dry	5	08/01/19 12:41 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0215	0.0215	0.0537		mg/Kg-dry	1	08/02/19 01:44 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	470	25.5	63.8		mg/Kg-dry	10	08/05/19 11:15 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	26.5	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-03-2.5-2.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-22
Project No:	6-0141-11	**Collection Date:**	07/26/19 10:02 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	<0.609	0.609	1.22		mg/Kg-dry	5	08/01/19 12:59 PM
Barium	8.98	0.609	2.43		mg/Kg-dry	5	08/01/19 12:59 PM
Cadmium	<0.122	0.122	0.365		mg/Kg-dry	5	08/01/19 12:59 PM
Chromium	7.06	0.609	2.43		mg/Kg-dry	5	08/01/19 12:59 PM
Lead	0.226	0.122	0.365	J	mg/Kg-dry	5	08/01/19 12:59 PM
Selenium	<0.183	0.183	0.609		mg/Kg-dry	5	08/01/19 12:59 PM
Silver	<0.122	0.122	0.243		mg/Kg-dry	5	08/01/19 12:59 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0193	0.0193	0.0481		mg/Kg-dry	1	08/02/19 01:47 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	132	22.8	56.9		mg/Kg-dry	10	08/05/19 11:31 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	18.7	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-03-5-6
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-23
Project No:	6-0141-11	**Collection Date:**	07/26/19 10:05 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.59	0.507	1.01		mg/Kg-dry	5	08/01/19 01:01 PM
Barium	14.5	0.507	2.03		mg/Kg-dry	5	08/01/19 01:01 PM
Cadmium	0.138	0.101	0.304	J	mg/Kg-dry	5	08/01/19 01:01 PM
Chromium	5.00	0.507	2.03		mg/Kg-dry	5	08/01/19 01:01 PM
Lead	0.946	0.101	0.304		mg/Kg-dry	5	08/01/19 01:01 PM
Selenium	0.174	0.152	0.507	J	mg/Kg-dry	5	08/01/19 01:01 PM
Silver	<0.101	0.101	0.203		mg/Kg-dry	5	08/01/19 01:01 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0183	0.0183	0.0457		mg/Kg-dry	1	08/02/19 01:54 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	34.1	22.9	57.3	J	mg/Kg-dry	10	08/05/19 11:47 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	13.4	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-03-7.5-7.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-24
Project No:	6-0141-11	**Collection Date:**	07/26/19 10:10 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	7.16	0.546	1.09		mg/Kg-dry	5	08/01/19 01:03 PM
Barium	110	0.546	2.18		mg/Kg-dry	5	08/01/19 01:03 PM
Cadmium	<0.109	0.109	0.327		mg/Kg-dry	5	08/01/19 01:03 PM
Chromium	31.3	0.546	2.18		mg/Kg-dry	5	08/01/19 01:03 PM
Lead	3.21	0.109	0.327		mg/Kg-dry	5	08/01/19 01:03 PM
Selenium	1.71	0.164	0.546		mg/Kg-dry	5	08/01/19 01:03 PM
Silver	<0.109	0.109	0.218		mg/Kg-dry	5	08/01/19 01:03 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	0.0431	0.0187	0.0468	J	mg/Kg-dry	1	08/02/19 01:56 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	42.2	23.8	59.4	J	mg/Kg-dry	10	08/06/19 12:03 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	18.2	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-04-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-26
Project No:	6-0141-11	**Collection Date:**	07/26/19 10:32 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	4.80	0.595	1.19		mg/Kg-dry	5	08/01/19 01:05 PM
Barium	137	0.595	2.38		mg/Kg-dry	5	08/01/19 01:05 PM
Cadmium	0.148	0.119	0.357	J	mg/Kg-dry	5	08/01/19 01:05 PM
Chromium	44.4	0.595	2.38		mg/Kg-dry	5	08/01/19 01:05 PM
Lead	5.47	0.119	0.357		mg/Kg-dry	5	08/01/19 01:05 PM
Selenium	1.62	0.179	0.595		mg/Kg-dry	5	08/01/19 01:05 PM
Silver	<0.119	0.119	0.238		mg/Kg-dry	5	08/01/19 01:05 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0187	0.0187	0.0468		mg/Kg-dry	1	08/02/19 01:58 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	62.3	23.9	59.7		mg/Kg-dry	10	08/06/19 01:39 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	20.0	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-04-2.5-4
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-27
Project No:	6-0141-11	**Collection Date:**	07/26/19 10:37 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	6.43	0.541	1.08		mg/Kg-dry	5	08/01/19 12:21 PM
Barium	62.1	0.541	2.17		mg/Kg-dry	5	08/01/19 12:21 PM
Cadmium	0.243	0.108	0.325	J	mg/Kg-dry	5	08/01/19 12:21 PM
Chromium	13.1	0.541	2.17		mg/Kg-dry	5	08/01/19 12:21 PM
Lead	4.08	0.108	0.325		mg/Kg-dry	5	08/01/19 12:21 PM
Selenium	0.632	0.162	0.541		mg/Kg-dry	5	08/01/19 12:21 PM
Silver	<0.108	0.108	0.217		mg/Kg-dry	5	08/01/19 12:21 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	0.0183	0.0174	0.0435	J	mg/Kg-dry	1	08/02/19 02:00 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	130	22.7	56.7		mg/Kg-dry	10	08/06/19 01:55 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	12.0	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-04-5.0-5.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-28
Project No:	6-0141-11	**Collection Date:**	07/26/19 10:40 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.20	0.499	0.998		mg/Kg-dry	5	08/01/19 01:07 PM
Barium	14.9	0.499	2.00		mg/Kg-dry	5	08/01/19 01:07 PM
Cadmium	0.157	0.0998	0.299	J	mg/Kg-dry	5	08/01/19 01:07 PM
Chromium	6.55	0.499	2.00		mg/Kg-dry	5	08/01/19 01:07 PM
Lead	1.57	0.0998	0.299		mg/Kg-dry	5	08/01/19 01:07 PM
Selenium	0.828	0.150	0.499		mg/Kg-dry	5	08/01/19 01:07 PM
Silver	<0.0998	0.0998	0.200		mg/Kg-dry	5	08/01/19 01:07 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0153	0.0153	0.0384		mg/Kg-dry	1	08/02/19 02:03 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	104	21.0	52.6		mg/Kg-dry	10	08/06/19 02:11 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	7.21	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-04-7.5-7.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-29
Project No:	6-0141-11	**Collection Date:**	07/26/19 10:43 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	<0.574	0.574	1.15		mg/Kg-dry	5	08/01/19 01:09 PM
Barium	1.58	0.574	2.30	J	mg/Kg-dry	5	08/01/19 01:09 PM
Cadmium	<0.115	0.115	0.344		mg/Kg-dry	5	08/01/19 01:09 PM
Chromium	0.979	0.574	2.30	J	mg/Kg-dry	5	08/01/19 01:09 PM
Lead	0.125	0.115	0.344	J	mg/Kg-dry	5	08/01/19 01:09 PM
Selenium	<0.172	0.172	0.574		mg/Kg-dry	5	08/01/19 01:09 PM
Silver	<0.115	0.115	0.230		mg/Kg-dry	5	08/01/19 01:09 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0162	0.0162	0.0406		mg/Kg-dry	1	08/02/19 02:05 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<22.5	22.5	56.2		mg/Kg-dry	10	08/06/19 02:27 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	16.2	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-05-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-31
Project No:	6-0141-11	**Collection Date:**	07/26/19 11:00 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	7.69	0.547	1.09		mg/Kg-dry	5	08/01/19 01:11 PM
Barium	139	0.547	2.19		mg/Kg-dry	5	08/01/19 01:11 PM
Cadmium	0.261	0.109	0.328	J	mg/Kg-dry	5	08/01/19 01:11 PM
Chromium	238	0.547	2.19		mg/Kg-dry	5	08/01/19 01:11 PM
Lead	14.8	0.109	0.328		mg/Kg-dry	5	08/01/19 01:11 PM
Selenium	1.08	0.164	0.547		mg/Kg-dry	5	08/01/19 01:11 PM
Silver	<0.109	0.109	0.219		mg/Kg-dry	5	08/01/19 01:11 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	0.150	0.0191	0.0477		mg/Kg-dry	1	08/02/19 02:07 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	48.8	22.4	56.0	J	mg/Kg-dry	10	08/06/19 02:43 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	16.9	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-05-2.5-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-32
Project No:	6-0141-11	**Collection Date:**	07/26/19 11:04 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	7.45	0.539	1.08		mg/Kg-dry	5	08/01/19 01:13 PM
Barium	177	0.539	2.16		mg/Kg-dry	5	08/01/19 01:13 PM
Cadmium	0.430	0.108	0.323		mg/Kg-dry	5	08/01/19 01:13 PM
Chromium	205	0.539	2.16		mg/Kg-dry	5	08/01/19 01:13 PM
Lead	17.9	0.108	0.323		mg/Kg-dry	5	08/01/19 01:13 PM
Selenium	1.12	0.162	0.539		mg/Kg-dry	5	08/01/19 01:13 PM
Silver	<0.108	0.108	0.216		mg/Kg-dry	5	08/01/19 01:13 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	0.0522	0.0179	0.0448		mg/Kg-dry	1	08/02/19 02:09 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	55.1	23.6	59.1	J	mg/Kg-dry	10	08/06/19 02:59 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.7	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-05-5-6
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-33
Project No:	6-0141-11	**Collection Date:**	07/26/19 11:07 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	8.64	0.617	1.23		mg/Kg-dry	5	08/01/19 01:15 PM
Barium	197	0.617	2.47		mg/Kg-dry	5	08/01/19 01:15 PM
Cadmium	0.438	0.123	0.370		mg/Kg-dry	5	08/01/19 01:15 PM
Chromium	427	0.617	2.47		mg/Kg-dry	5	08/01/19 01:15 PM
Lead	21.4	0.123	0.370		mg/Kg-dry	5	08/01/19 01:15 PM
Selenium	1.48	0.185	0.617		mg/Kg-dry	5	08/01/19 01:15 PM
Silver	<0.123	0.123	0.247		mg/Kg-dry	5	08/01/19 01:15 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	0.449	0.0172	0.0430		mg/Kg-dry	1	08/02/19 02:12 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	153	23.8	59.4		mg/Kg-dry	10	08/06/19 03:15 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	19.7	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-06-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-34
Project No:	6-0141-11	**Collection Date:**	07/26/19 11:33 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	4.04	0.529	1.06		mg/Kg-dry	5	08/01/19 01:17 PM
Barium	165	0.529	2.12		mg/Kg-dry	5	08/01/19 01:17 PM
Cadmium	0.147	0.106	0.318	J	mg/Kg-dry	5	08/01/19 01:17 PM
Chromium	19.4	0.529	2.12		mg/Kg-dry	5	08/01/19 01:17 PM
Lead	6.61	0.106	0.318		mg/Kg-dry	5	08/01/19 01:17 PM
Selenium	1.77	0.159	0.529		mg/Kg-dry	5	08/01/19 01:17 PM
Silver	<0.106	0.106	0.212		mg/Kg-dry	5	08/01/19 01:17 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0180	0.0180	0.0450		mg/Kg-dry	1	08/07/19 09:44 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	543	23.2	57.9		mg/Kg-dry	10	08/06/19 03:31 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	17.1	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-06-2.5-3.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-35
Project No:	6-0141-11	**Collection Date:**	07/26/19 11:35 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	<0.690	0.690	1.38		mg/Kg-dry	5	08/01/19 11:05 AM
Barium	2.18	0.690	2.76	J	mg/Kg-dry	5	08/01/19 11:05 AM
Cadmium	<0.138	0.138	0.414		mg/Kg-dry	5	08/01/19 11:05 AM
Chromium	3.76	0.690	2.76		mg/Kg-dry	5	08/01/19 11:05 AM
Lead	0.173	0.138	0.414	J	mg/Kg-dry	5	08/01/19 11:05 AM
Selenium	<0.207	0.207	0.690		mg/Kg-dry	5	08/01/19 11:05 AM
Silver	<0.138	0.138	0.276		mg/Kg-dry	5	08/01/19 11:05 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0207	0.0207	0.0517		mg/Kg-dry	1	08/07/19 09:47 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	95.4	27.8	69.4		mg/Kg-dry	10	08/06/19 03:47 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	32.9	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	07-06-5-5.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907385-36
Project No:	6-0141-11	**Collection Date:**	07/26/19 11:40 AM
Lab Order:	1907385	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	0.625	0.578	1.16	J	mg/Kg-dry	5	08/01/19 11:07 AM
Barium	1.41	0.578	2.31	J	mg/Kg-dry	5	08/01/19 11:07 AM
Cadmium	<0.116	0.116	0.347		mg/Kg-dry	5	08/01/19 11:07 AM
Chromium	3.77	0.578	2.31		mg/Kg-dry	5	08/01/19 11:07 AM
Lead	0.152	0.116	0.347	J	mg/Kg-dry	5	08/01/19 11:07 AM
Selenium	<0.173	0.173	0.578		mg/Kg-dry	5	08/01/19 11:07 AM
Silver	<0.116	0.116	0.231		mg/Kg-dry	5	08/01/19 11:07 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **BM**
Mercury	<0.0188	0.0188	0.0470		mg/Kg-dry	1	08/07/19 09:49 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	117	23.6	58.9		mg/Kg-dry	10	08/06/19 04:03 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	18.4	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc. **Date:** *19-Aug-19*

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190802A

The QC data in batch 92104 applies to the following samples: 1907385-01A, 1907385-02A

Sample ID **MB-92104** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 9:05:48 AM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO C6-C10	<7.00	20.0								
TPH-DRO >C10-C28	<7.00	20.0								
TPH-ORO >C28-C35	<7.00	20.0								
T/R Hydrocarbons: C6-C35	<7.00	20.0								
Surr: Isopropylbenzene	24.6		25.00		98.3	70	130			
Surr: Octacosane	27.6		25.00		110	70	130			

Sample ID **LCS-92104** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 9:14:46 AM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	232	20.0	250.0	0	92.7	75	125			
Surr: Isopropylbenzene	24.1		25.00		96.6	70	130			
Surr: Octacosane	24.9		25.00		99.4	70	130			

Sample ID **LCSD-92104** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCSD** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 9:23:43 AM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	245	20.0	250.0	0	97.8	75	125	5.34	20	
Surr: Isopropylbenzene	25.0		25.00		99.8	70	130	0	0	
Surr: Octacosane	25.4		25.00		101	70	130	0	0	

Sample ID **1907385-02AMS** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 12:16:20 PM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	291	25.8	322.7	0	90.1	70	119			
Surr: Isopropylbenzene	26.8		32.27		83.1	70	130			
Surr: Octacosane	31.6		32.27		98.0	70	130			

Sample ID **1907385-02AMSD** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 12:25:15 PM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	324	28.0	349.4	0	92.8	75	125	10.9	20	
Surr: Isopropylbenzene	33.3		34.94		95.4	70	130	0	0	
Surr: Octacosane	37.2		34.94		106	70	130	0	0	

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190802A

Sample ID **ICV-190802**	Batch ID: **R105523**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC12_190802A**	Analysis Date: **8/2/2019 8:52:53 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	935	20.0	1000	0	93.5	75	125			
Surr: Isopropylbenzene	50.5		50.00		101	70	130			
Surr: Octacosane	48.5		50.00		97.0	70	130			

Sample ID **CCV1-190802**	Batch ID: **R105523**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC12_190802A**	Analysis Date: **8/2/2019 3:04:30 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	486	20.0	500.0	0	97.3	75	125			
Surr: Isopropylbenzene	22.5		25.00		89.9	70	130			
Surr: Octacosane	22.1		25.00		88.3	70	130			

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190807A

The QC data in batch 92190 applies to the following samples: 1907385-03A, 1907385-04A, 1907385-05A, 1907385-06A, 1907385-07A, 1907385-08A, 1907385-09A, 1907385-10A

Sample ID	MB-92190	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg
SampType:	MBLK	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 7:39:33 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO C6-C10	<7.00	20.0								
TPH-DRO >C10-C28	<7.00	20.0								
TPH-ORO >C28-C35	<7.00	20.0								
T/R Hydrocarbons: C6-C35	<7.00	20.0								
Surr: Isopropylbenzene	21.2		25.00		84.8	70	130			
Surr: Octacosane	22.8		25.00		91.2	70	130			

Sample ID	LCS-92190	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg
SampType:	LCS	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 7:48:31 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	212	20.0	250.0	0	84.9	75	125			
Surr: Isopropylbenzene	24.5		25.00		97.9	70	130			
Surr: Octacosane	23.4		25.00		93.8	70	130			

Sample ID	LCSD-92190	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg
SampType:	LCSD	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 7:57:28 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	213	20.0	250.0	0	85.0	75	125	0.095	20	
Surr: Isopropylbenzene	24.7		25.00		99.0	70	130	0	0	
Surr: Octacosane	24.2		25.00		96.8	70	130	0	0	

Sample ID	1907385-03AMS	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 9:27:29 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	210	21.0	262.6	0	79.9	70	119			
Surr: Isopropylbenzene	23.6		26.26		89.9	70	130			
Surr: Octacosane	25.2		26.26		95.8	70	130			

Sample ID	1907385-03AMSD	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 9:36:27 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	231	20.3	253.4	0	91.2	75	125	9.64	20	
Surr: Isopropylbenzene	26.0		25.34		102	70	130	0	0	
Surr: Octacosane	25.3		25.34		99.7	70	130	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190807A

Sample ID **ICV-190807**	Batch ID: **R105629**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC12_190807A**	Analysis Date: **8/7/2019 7:24:50 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	934	20.0	1000	0	93.4	75	125			
Surr: Isopropylbenzene	51.3		50.00		103	70	130			
Surr: Octacosane	50.8		50.00		102	70	130			

Sample ID **CCV1-190807**	Batch ID: **R105629**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC12_190807A**	Analysis Date: **8/7/2019 9:45:24 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	429	20.0	500.0	0	85.7	75	125			
Surr: Isopropylbenzene	19.8		25.00		79.2	70	130			
Surr: Octacosane	20.4		25.00		81.7	70	130			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190802B

The QC data in batch 92121 applies to the following samples: 1907385-11A, 1907385-12A, 1907385-13A, 1907385-14A, 1907385-16A, 1907385-17A, 1907385-18A, 1907385-19A, 1907385-21A, 1907385-22A, 1907385-23A, 1907385-24A, 1907385-26A, 1907385-27A, 1907385-28A, 1907385-29A, 1907385-31A, 1907385-32A, 1907385-33A

Sample ID **MB-92121** Batch ID: **92121** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **MBLK** Run ID: **CETAC2_HG_190802** Analysis Date: **8/2/2019 1:10:56 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0160	0.0400								

Sample ID **LCS-92121** Batch ID: **92121** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **LCS** Run ID: **CETAC2_HG_190802** Analysis Date: **8/2/2019 1:13:12 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.204	0.0400	0.2000	0	102	85	115			

Sample ID **LCSD-92121** Batch ID: **92121** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **LCSD** Run ID: **CETAC2_HG_190802** Analysis Date: **8/2/2019 1:15:28 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.202	0.0400	0.2000	0	101	85	115	0.985	25	

Sample ID **1907385-18A MS** Batch ID: **92121** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **CETAC2_HG_190802** Analysis Date: **8/2/2019 1:33:35 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.212	0.0394	0.1969	0	108	80	120			

Sample ID **1907385-18A MSD** Batch ID: **92121** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **CETAC2_HG_190802** Analysis Date: **8/2/2019 1:35:50 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.218	0.0410	0.2048	0	106	80	120	2.97	25	

Sample ID **1907385-18A SD** Batch ID: **92121** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **SD** Run ID: **CETAC2_HG_190802** Analysis Date: **8/2/2019 1:38:06 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0758	0.190	0	0				0	10	

Sample ID **1907385-18A PDS** Batch ID: **92121** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **PDS** Run ID: **CETAC2_HG_190802** Analysis Date: **8/2/2019 1:40:22 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.223	0.0379	0.2370	0	94.0	85	115			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190802B

Sample ID	ICV-190802	Batch ID:	R105519	TestNo:	SW7471B	Units:	mg/Kg
SampType:	ICV	Run ID:	CETAC2_HG_190802	Analysis Date:	8/2/2019 1:06:22 PM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00395	0.0400	0.004000	0	98.8	90	110			

Sample ID	CCV1-190802	Batch ID:	R105519	TestNo:	SW7471B	Units:	mg/Kg
SampType:	CCV	Run ID:	CETAC2_HG_190802	Analysis Date:	8/2/2019 1:49:28 PM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00198	0.0400	0.002000	0	99.0	90	110			

Sample ID	CCV2-190802	Batch ID:	R105519	TestNo:	SW7471B	Units:	mg/Kg
SampType:	CCV	Run ID:	CETAC2_HG_190802	Analysis Date:	8/2/2019 2:16:47 PM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00198	0.0400	0.002000	0	99.0	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190807A

The QC data in batch 92130 applies to the following samples: 1907385-34A, 1907385-35A, 1907385-36A

Sample ID	MB-92130	Batch ID:	92130	TestNo:	SW7471B	Units:	mg/Kg
SampType:	MBLK	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 9:38:10 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0160	0.0400								

Sample ID	LCS-92130	Batch ID:	92130	TestNo:	SW7471B	Units:	mg/Kg
SampType:	LCS	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 9:40:26 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.203	0.0400	0.2000	0	102	85	115			

Sample ID	LCSD-92130	Batch ID:	92130	TestNo:	SW7471B	Units:	mg/Kg
SampType:	LCSD	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 9:42:42 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.203	0.0400	0.2000	0	102	85	115	0	25	

Sample ID	1907393-45B MS	Batch ID:	92130	TestNo:	SW7471B	Units:	mg/Kg-dry
SampType:	MS	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 10:25:55 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.202	0.0312	0.1559	0.04492	101	80	120			

Sample ID	1907393-45B MSD	Batch ID:	92130	TestNo:	SW7471B	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 10:28:11 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.199	0.0308	0.1540	0.04492	100	80	120	1.17	25	

Sample ID	1907393-45B SD	Batch ID:	92130	TestNo:	SW7471B	Units:	mg/Kg-dry
SampType:	SD	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 10:30:27 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0631	0.158	0	0.04492				0	10	

Sample ID	1907393-45B PDS	Batch ID:	92130	TestNo:	SW7471B	Units:	mg/Kg-dry
SampType:	PDS	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 10:32:43 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.218	0.0315	0.1970	0.04492	87.6	85	115			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_190807A

Sample ID	ICV-190807	Batch ID:	R105614	TestNo:	SW7471B	Units:	mg/Kg
SampType:	ICV	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 9:33:36 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00395	0.0400	0.004000	0	98.8	90	110			

Sample ID	CCV1-190807	Batch ID:	R105614	TestNo:	SW7471B	Units:	mg/Kg
SampType:	CCV	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 10:19:04 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00199	0.0400	0.002000	0	99.5	90	110			

Sample ID	CCV2-190807	Batch ID:	R105614	TestNo:	SW7471B	Units:	mg/Kg
SampType:	CCV	Run ID:	CETAC2_HG_190807A	Analysis Date:	8/7/2019 10:55:28 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00201	0.0400	0.002000	0	101	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190801A

The QC data in batch 92056 applies to the following samples: 1907385-11A, 1907385-12A, 1907385-13A, 1907385-14A, 1907385-16A, 1907385-17A, 1907385-18A, 1907385-19A, 1907385-21A, 1907385-22A, 1907385-23A, 1907385-24A, 1907385-26A, 1907385-27A, 1907385-28A, 1907385-29A, 1907385-31A, 1907385-32A, 1907385-33A, 1907385-34A

Sample ID **MB-92056** Batch ID: **92056** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 12:13:00 PM** Prep Date: **7/31/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.500	1.00								
Barium	<0.500	2.00								
Cadmium	<0.100	0.300								
Chromium	<0.500	2.00								
Lead	<0.100	0.300								
Selenium	<0.150	0.500								
Silver	<0.100	0.200								

Sample ID **LCS-92056** Batch ID: **92056** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **LCS** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 12:15:00 PM** Prep Date: **7/31/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	51.0	1.00	50.00	0	102	80	120			
Barium	50.7	2.00	50.00	0	101	80	120			
Cadmium	53.1	0.300	50.00	0	106	80	120			
Chromium	53.2	2.00	50.00	0	106	80	120			
Lead	50.3	0.300	50.00	0	101	80	120			
Selenium	48.4	0.500	50.00	0	96.7	80	120			
Silver	55.5	0.200	50.00	0	111	80	120			

Sample ID **LCSD-92056** Batch ID: **92056** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **LCSD** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 12:17:00 PM** Prep Date: **7/31/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	51.1	1.00	50.00	0	102	80	120	0.282	25	
Barium	49.8	2.00	50.00	0	99.5	80	120	1.84	25	
Cadmium	51.9	0.300	50.00	0	104	80	120	2.32	25	
Chromium	52.9	2.00	50.00	0	106	80	120	0.591	25	
Lead	50.1	0.300	50.00	0	100	80	120	0.356	25	
Selenium	47.5	0.500	50.00	0	95.1	80	120	1.73	25	
Silver	53.9	0.200	50.00	0	108	80	120	2.90	25	

Sample ID **1907385-27A SD** Batch ID: **92056** TestNo: **SW6020A** Units: **mg/Kg-dry**
SampType: **SD** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 12:23:00 PM** Prep Date: **7/31/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	6.74	5.41	0	6.435				4.66	10	
Barium	67.1	10.8	0	62.09				7.81	10	
Cadmium	<0.541	1.62	0	0.2434				0	10	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190801A

Sample ID	1907385-27A SD	Batch ID:	92056	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	SD	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 12:23:00 PM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	15.3	10.8	0	13.10				15.3	10	R
Lead	4.43	1.62	0	4.078				8.19	10	
Selenium	1.03	2.71	0	0.6321				48.3	10	R
Silver	<0.541	1.08	0	0				0	10	

Sample ID	1907385-27A PDS	Batch ID:	92056	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	PDS	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 12:43:00 PM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	62.1	1.08	54.14	6.435	103	80	120			
Barium	121	2.17	54.14	62.09	109	80	120			
Cadmium	51.5	0.325	54.14	0.2434	94.6	80	120			
Chromium	66.6	2.17	54.14	13.10	98.8	80	120			
Lead	59.3	0.325	54.14	4.078	102	80	120			
Selenium	52.7	0.541	54.14	0.6321	96.2	80	120			
Silver	47.1	0.217	54.14	0	87.1	80	120			

Sample ID	1907385-27A MS	Batch ID:	92056	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	MS	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 12:45:00 PM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	74.5	1.06	53.13	6.435	128	80	120			S
Barium	121	2.13	53.13	62.09	110	80	120			
Cadmium	50.4	0.319	53.13	0.2434	94.4	80	120			
Chromium	65.2	2.13	53.13	13.10	98.0	80	120			
Lead	62.5	0.319	53.13	4.078	110	80	120			
Selenium	53.2	0.531	53.13	0.6321	99.0	80	120			
Silver	47.7	0.213	53.13	0	89.8	80	120			

Sample ID	1907385-27A MSD	Batch ID:	92056	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 12:47:00 PM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	62.3	1.07	53.63	6.435	104	80	120	17.8	25	
Barium	105	2.15	53.63	62.09	80.2	80	120	13.7	25	
Cadmium	50.2	0.322	53.63	0.2434	93.2	80	120	0.296	25	
Chromium	62.3	2.15	53.63	13.10	91.7	80	120	4.49	25	
Lead	59.6	0.322	53.63	4.078	104	80	120	4.72	25	
Selenium	54.3	0.536	53.63	0.6321	100	80	120	2.09	25	
Silver	47.7	0.215	53.63	0	89.0	80	120	0.026	25	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190801A

The QC data in batch 92063 applies to the following samples: 1907385-35A, 1907385-36A

Sample ID	MB-92063	Batch ID:	92063	TestNo:	SW6020A	Units:	mg/Kg
SampType:	MBLK	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 10:53:00 AM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.500	1.00								
Barium	<0.500	2.00								
Cadmium	<0.100	0.300								
Chromium	<0.500	2.00								
Lead	<0.100	0.300								
Selenium	<0.150	0.500								
Silver	<0.100	0.200								

Sample ID	LCS-92063	Batch ID:	92063	TestNo:	SW6020A	Units:	mg/Kg
SampType:	LCS	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 10:55:00 AM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	53.0	1.00	50.00	0	106	80	120			
Barium	51.0	2.00	50.00	0	102	80	120			
Cadmium	52.6	0.300	50.00	0	105	80	120			
Chromium	53.8	2.00	50.00	0	108	80	120			
Lead	51.5	0.300	50.00	0	103	80	120			
Selenium	49.5	0.500	50.00	0	98.9	80	120			
Silver	54.8	0.200	50.00	0	110	80	120			

Sample ID	LCSD-92063	Batch ID:	92063	TestNo:	SW6020A	Units:	mg/Kg
SampType:	LCSD	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 10:57:00 AM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	52.8	1.00	50.00	0	106	80	120	0.297	25	
Barium	51.2	2.00	50.00	0	102	80	120	0.396	25	
Cadmium	53.0	0.300	50.00	0	106	80	120	0.625	25	
Chromium	53.1	2.00	50.00	0	106	80	120	1.16	25	
Lead	52.4	0.300	50.00	0	105	80	120	1.76	25	
Selenium	49.0	0.500	50.00	0	98.0	80	120	0.973	25	
Silver	55.0	0.200	50.00	0	110	80	120	0.466	25	

Sample ID	1907383-01A SD	Batch ID:	92063	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	SD	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 11:03:00 AM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	5.69	5.47	0	6.072				6.45	10	
Barium	67.8	10.9	0	75.01				10.1	10	
Cadmium	<0.547	1.64	0	0				0	10	
Chromium	9.45	10.9	0	10.13				6.95	10	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190801A

Sample ID	1907383-01A SD	Batch ID:	92063	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	SD	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 11:03:00 AM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	8.94	1.64	0	10.06				11.8	10	R
Selenium	6.43	2.73	0	6.290				2.13	10	
Silver	<0.547	1.09	0	0				0	10	

Sample ID	1907383-01A PDS	Batch ID:	92063	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	PDS	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 11:22:00 AM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	59.2	1.09	54.67	6.072	97.2	80	120			
Barium	126	2.19	54.67	75.01	93.1	80	120			
Cadmium	57.6	0.328	54.67	0	105	80	120			
Chromium	64.3	2.19	54.67	10.13	99.0	80	120			
Lead	64.2	0.328	54.67	10.06	99.1	80	120			
Selenium	55.5	0.547	54.67	6.290	90.0	80	120			
Silver	57.2	0.219	54.67	0	105	80	120			

Sample ID	1907383-01A MS	Batch ID:	92063	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	MS	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 11:24:00 AM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	69.6	1.06	53.12	6.072	120	80	120			
Barium	181	2.12	53.12	75.01	199	80	120			S
Cadmium	54.6	0.319	53.12	0	103	80	120			
Chromium	64.0	2.12	53.12	10.13	101	80	120			
Lead	71.0	0.319	53.12	10.06	115	80	120			
Selenium	54.8	0.531	53.12	6.290	91.3	80	120			
Silver	57.1	0.212	53.12	0	108	80	120			

Sample ID	1907383-01A MSD	Batch ID:	92063	TestNo:	SW6020A	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 11:26:00 AM	Prep Date:	7/31/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	59.6	1.09	54.67	6.072	97.9	80	120	15.5	25	
Barium	94.4	2.19	54.67	75.01	35.5	80	120	62.7	25	SR
Cadmium	57.5	0.328	54.67	0	105	80	120	5.15	25	
Chromium	65.8	2.19	54.67	10.13	102	80	120	2.76	25	
Lead	66.0	0.328	54.67	10.06	102	80	120	7.30	25	
Selenium	55.5	0.547	54.67	6.290	89.9	80	120	1.18	25	
Silver	60.0	0.219	54.67	0	110	80	120	4.96	25	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190801A

Sample ID **ICV-190801** Batch ID: **R105482** TestNo: **SW6020A** Units: **mg/L**
SampType: **ICV** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 10:41:00 AM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.103	0.00500	0.100	0	103	90	110			
Barium	0.0986	0.0100	0.100	0	98.6	90	110			
Cadmium	0.102	0.00100	0.100	0	102	90	110			
Chromium	0.106	0.00500	0.100	0	106	90	110			
Lead	0.101	0.00100	0.100	0	101	90	110			
Selenium	0.101	0.00500	0.100	0	101	90	110			
Silver	0.107	0.00200	0.100	0	107	90	110			

Sample ID **LCVL-190801** Batch ID: **R105482** TestNo: **SW6020A** Units: **mg/L**
SampType: **LCVL** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 10:45:00 AM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00516	0.00500	0.00500	0	103	70	130			
Barium	0.00514	0.0100	0.00500	0	103	70	130			
Cadmium	0.00114	0.00100	0.00100	0	114	70	130			
Chromium	0.00529	0.00500	0.00500	0	106	70	130			
Lead	0.000987	0.00100	0.00100	0	98.7	70	130			
Selenium	0.00508	0.00500	0.00500	0	102	70	130			
Silver	0.00222	0.00200	0.00200	0	111	70	130			

Sample ID **CCV1-190801** Batch ID: **R105482** TestNo: **SW6020A** Units: **mg/L**
SampType: **CCV** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 11:37:00 AM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.197	0.00500	0.200	0	98.6	90	110			
Barium	0.194	0.0100	0.200	0	97.2	90	110			
Cadmium	0.206	0.00100	0.200	0	103	90	110			
Chromium	0.203	0.00500	0.200	0	101	90	110			
Lead	0.192	0.00100	0.200	0	96.0	90	110			
Selenium	0.188	0.00500	0.200	0	93.9	90	110			
Silver	0.217	0.00200	0.200	0	109	90	110			

Sample ID **LCVL1-190801** Batch ID: **R105482** TestNo: **SW6020A** Units: **mg/L**
SampType: **LCVL** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 11:41:00 AM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00524	0.00500	0.00500	0	105	70	130			
Barium	0.00502	0.0100	0.00500	0	100	70	130			
Cadmium	0.00111	0.00100	0.00100	0	111	70	130			
Chromium	0.00536	0.00500	0.00500	0	107	70	130			
Lead	0.000996	0.00100	0.00100	0	99.6	70	130			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190801A

Sample ID	LCVL1-190801	Batch ID:	R105482	TestNo:	SW6020A	Units:	mg/L
SampType:	LCVL	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 11:41:00 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.00488	0.00500	0.00500	0	97.5	70	130			
Silver	0.00232	0.00200	0.00200	0	116	70	130			

Sample ID	CCV2-190801	Batch ID:	R105482	TestNo:	SW6020A	Units:	mg/L
SampType:	CCV	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 12:04:00 PM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.199	0.00500	0.200	0	99.4	90	110			
Barium	0.196	0.0100	0.200	0	97.9	90	110			
Cadmium	0.204	0.00100	0.200	0	102	90	110			
Chromium	0.203	0.00500	0.200	0	102	90	110			
Lead	0.193	0.00100	0.200	0	96.3	90	110			
Selenium	0.191	0.00500	0.200	0	95.6	90	110			
Silver	0.216	0.00200	0.200	0	108	90	110			

Sample ID	LCVL2-190801	Batch ID:	R105482	TestNo:	SW6020A	Units:	mg/L
SampType:	LCVL	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 12:09:00 PM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00519	0.00500	0.00500	0	104	70	130			
Barium	0.00509	0.0100	0.00500	0	102	70	130			
Cadmium	0.00111	0.00100	0.00100	0	111	70	130			
Chromium	0.00539	0.00500	0.00500	0	108	70	130			
Lead	0.000971	0.00100	0.00100	0	97.1	70	130			
Selenium	0.00534	0.00500	0.00500	0	107	70	130			
Silver	0.00227	0.00200	0.00200	0	114	70	130			

Sample ID	CCV3-190801	Batch ID:	R105482	TestNo:	SW6020A	Units:	mg/L
SampType:	CCV	Run ID:	ICP-MS4_190801A	Analysis Date:	8/1/2019 12:49:00 PM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.199	0.00500	0.200	0	99.7	90	110			
Barium	0.208	0.0100	0.200	0	104	90	110			
Cadmium	0.206	0.00100	0.200	0	103	90	110			
Chromium	0.206	0.00500	0.200	0	103	90	110			
Lead	0.198	0.00100	0.200	0	99.2	90	110			
Selenium	0.196	0.00500	0.200	0	97.9	90	110			
Silver	0.212	0.00200	0.200	0	106	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_190801A

Sample ID **LCVL3-190801** Batch ID: **R105482** TestNo: **SW6020A** Units: **mg/L**
SampType: **LCVL** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 12:53:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00520	0.00500	0.00500	0	104	70	130			
Barium	0.00520	0.0100	0.00500	0	104	70	130			
Cadmium	0.00105	0.00100	0.00100	0	105	70	130			
Chromium	0.00542	0.00500	0.00500	0	108	70	130			
Lead	0.000980	0.00100	0.00100	0	98.0	70	130			
Selenium	0.00558	0.00500	0.00500	0	112	70	130			
Silver	0.00216	0.00200	0.00200	0	108	70	130			

Sample ID **CCV4-190801** Batch ID: **R105482** TestNo: **SW6020A** Units: **mg/L**
SampType: **CCV** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 1:28:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.196	0.00500	0.200	0	98.0	90	110			
Barium	0.202	0.0100	0.200	0	101	90	110			
Cadmium	0.200	0.00100	0.200	0	100	90	110			
Chromium	0.206	0.00500	0.200	0	103	90	110			
Lead	0.187	0.00100	0.200	0	93.6	90	110			
Selenium	0.195	0.00500	0.200	0	97.3	90	110			
Silver	0.190	0.00200	0.200	0	94.9	90	110			

Sample ID **LCVL4-190801** Batch ID: **R105482** TestNo: **SW6020A** Units: **mg/L**
SampType: **LCVL** Run ID: **ICP-MS4_190801A** Analysis Date: **8/1/2019 1:32:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00522	0.00500	0.00500	0	104	70	130			
Barium	0.00518	0.0100	0.00500	0	104	70	130			
Cadmium	0.00103	0.00100	0.00100	0	103	70	130			
Chromium	0.00527	0.00500	0.00500	0	105	70	130			
Lead	0.000947	0.00100	0.00100	0	94.7	70	130			
Selenium	0.00475	0.00500	0.00500	0	95.1	70	130			
Silver	0.00209	0.00200	0.00200	0	105	70	130			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190805A

The QC data in batch 92075 applies to the following samples: 1907385-11A, 1907385-12A

Sample ID	MB-92075	Batch ID:	92075	TestNo:	SW9056A	Units:	mg/Kg
SampType:	MBLK	Run ID:	IC2_190805A	Analysis Date:	8/5/2019 9:48:36 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<2.00	5.00								

Sample ID	LCS-92075	Batch ID:	92075	TestNo:	SW9056A	Units:	mg/Kg
SampType:	LCS	Run ID:	IC2_190805A	Analysis Date:	8/5/2019 10:20:36 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	52.2	5.00	50.00	0	104	80	120			

Sample ID	LCSD-92075	Batch ID:	92075	TestNo:	SW9056A	Units:	mg/Kg
SampType:	LCSD	Run ID:	IC2_190805A	Analysis Date:	8/5/2019 10:36:36 AM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	52.2	5.00	50.00	0	104	80	120	0.075	15	

Sample ID	1907387-02A-DUP	Batch ID:	92075	TestNo:	SW9056A	Units:	mg/Kg-dry
SampType:	DUP	Run ID:	IC2_190805A	Analysis Date:	8/5/2019 7:15:15 PM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	28.6	63.5	0	37.27				26.4	10	R

Sample ID	1907387-18A-DUP	Batch ID:	92075	TestNo:	SW9056A	Units:	mg/Kg-dry
SampType:	DUP	Run ID:	IC2_190805A	Analysis Date:	8/5/2019 7:31:15 PM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	34.9	59.1	0	24.58				34.6	10	R

Sample ID	1907387-02AMS	Batch ID:	92075	TestNo:	SW9056A	Units:	mg/Kg-dry
SampType:	MS	Run ID:	IC2_190805A	Analysis Date:	8/5/2019 7:47:15 PM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	148	66.2	132.4	37.27	84.0	80	120			

Sample ID	1907387-02AMSD	Batch ID:	92075	TestNo:	SW9056A	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	IC2_190805A	Analysis Date:	8/5/2019 8:03:15 PM	Prep Date:	8/5/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	154	65.8	131.6	37.27	88.4	80	120	3.35	15	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190805A

Sample ID	**ICV-190805**	Batch ID:	**R105573**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**ICV**	Run ID:	**IC2_190805A**	Analysis Date:	**8/5/2019 9:16:36 AM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	27.0	5.00	25.00	0	108	90	110			

Sample ID	**CCV1-190805**	Batch ID:	**R105573**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**CCV**	Run ID:	**IC2_190805A**	Analysis Date:	**8/5/2019 3:51:54 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.5	5.00	10.00	0	105	90	110			

Sample ID	**CCV2-190805**	Batch ID:	**R105573**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**CCV**	Run ID:	**IC2_190805A**	Analysis Date:	**8/5/2019 9:07:15 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.6	5.00	10.00	0	106	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190805B

The QC data in batch 92090 applies to the following samples: 1907385-13A, 1907385-14A, 1907385-16A, 1907385-17A, 1907385-18A, 1907385-19A, 1907385-21A, 1907385-22A, 1907385-23A, 1907385-24A, 1907385-26A, 1907385-27A, 1907385-28A, 1907385-29A, 1907385-31A, 1907385-32A, 1907385-33A, 1907385-34A, 1907385-35A, 1907385-36A

Sample ID **MB-92090** Batch ID: **92090** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **IC2_190805B** Analysis Date: **8/5/2019 10:04:36 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<2.00	5.00								

Sample ID **LCS-92090** Batch ID: **92090** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **LCS** Run ID: **IC2_190805B** Analysis Date: **8/5/2019 10:52:36 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	52.2	5.00	50.00	0	104	80	120			

Sample ID **LCSD-92090** Batch ID: **92090** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **LCSD** Run ID: **IC2_190805B** Analysis Date: **8/5/2019 11:08:36 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	52.3	5.00	50.00	0	105	80	120	0.194	15	

Sample ID **1907385-18A-DUP** Batch ID: **92090** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **DUP** Run ID: **IC2_190805B** Analysis Date: **8/6/2019 4:19:15 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	51.0	54.0	0	57.67				12.4	10	R

Sample ID **1907385-21A-DUP** Batch ID: **92090** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **DUP** Run ID: **IC2_190805B** Analysis Date: **8/6/2019 4:35:15 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	360	65.7	0	470.5				26.6	10	R

Sample ID **1907385-18AMS** Batch ID: **92090** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **IC2_190805B** Analysis Date: **8/6/2019 4:51:15 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	160	54.8	109.6	57.67	93.2	80	120			

Sample ID **1907385-18AMSD** Batch ID: **92090** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **IC2_190805B** Analysis Date: **8/6/2019 5:07:15 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	162	54.3	108.6	57.67	95.7	80	120	1.05	15	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190805B

Sample ID	ICV-190805	Batch ID:	R105575	TestNo:	SW9056A	Units:	mg/Kg
SampType:	ICV	Run ID:	IC2_190805B	Analysis Date:	8/5/2019 9:16:36 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	27.0	5.00	25.00	0	108	90	110			

Sample ID	CCV2-190805	Batch ID:	R105575	TestNo:	SW9056A	Units:	mg/Kg
SampType:	CCV	Run ID:	IC2_190805B	Analysis Date:	8/5/2019 9:07:15 PM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.6	5.00	10.00	0	106	90	110			

Sample ID	CCV3-190805	Batch ID:	R105575	TestNo:	SW9056A	Units:	mg/Kg
SampType:	CCV	Run ID:	IC2_190805B	Analysis Date:	8/6/2019 1:07:15 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.6	5.00	10.00	0	106	90	110			

Sample ID	CCV4-190805	Batch ID:	R105575	TestNo:	SW9056A	Units:	mg/Kg
SampType:	CCV	Run ID:	IC2_190805B	Analysis Date:	8/6/2019 6:11:15 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.7	5.00	10.00	0	107	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190806A**

The QC data in batch 92200 applies to the following samples: 1907385-01A, 1907385-02A, 1907385-03A, 1907385-04A, 1907385-05A, 1907385-06A, 1907385-07A, 1907385-08A, 1907385-09A, 1907385-10A, 1907385-11A, 1907385-12A, 1907385-13A, 1907385-14A, 1907385-16A, 1907385-17A

Sample ID **1907385-17A-DUP** Batch ID: **92200** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190806A** Analysis Date: **8/7/2019 8:40:00 AM** Prep Date: **8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	26.6	0	0	29.05				8.95	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907385
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190806B**

The QC data in batch 92201 applies to the following samples: 1907385-18A, 1907385-19A, 1907385-21A, 1907385-22A, 1907385-23A, 1907385-24A, 1907385-26A, 1907385-27A, 1907385-28A, 1907385-29A, 1907385-31A, 1907385-32A, 1907385-33A, 1907385-34A, 1907385-35A, 1907385-36A

Sample ID **1907393-19A-DUP** Batch ID: **92201** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190806B** Analysis Date: **8/7/2019 8:40:00 AM** Prep Date: **8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	6.66	0	0	6.785				1.84	30	

Qualifiers:

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

August 19, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1907387

RE: AKA Energy/Empire ABO

Dear Mark Larson:

DHL Analytical, Inc. received 20 sample(s) on 7/30/2019 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

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

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№ 0122

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants

507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 7-24-2019 PAGE 1 OF 2

PO#:

LAB WORK ORDER#: 1907387

PROJECT LOCATION OR NAME: AKA Energy / Empire ABO

LAI PROJECT #: L-0141-11 COLLECTOR: RN/ML

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: MTn/NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESSERVED

ANALYSES: BTEX ☑ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ | TPH 1006 ☐ | GASOLINE MOD 8015 ☑ | DIESEL - MOD 8015 ☑ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ | PAH 8270 ☐ | HOLDPAH ☐ | 8081 PESTICIDES ☐ | 8082 PCBS ☐ | 8151 HERBICIDES ☐ | TBLP - METALS (RCRA) ☐ | TCLP VOC ☐ | TCLP - PEST ☐ | HERB ☐ | Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ | OTHER LIST ☐ | LEAD - TOTAL ☐ | D.W. 200.8 ☐ | TCLP ☐ | RCI ☐ | TOX ☐ | FLASHPOINT ☐ | TDS ☐ | TSS ☐ | % MOISTURE ☐ | CYANIDE ☐ | pH ☐ | HEXAVALENT CHROMIUM ☐ | PECHLORATE ☐ | EXPLOSIVES ☐ | ANIONS ☐ | CHLORIDE ☐ | ALKALINITY ☐ | Void

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	FIELD NOTES
06-01-0-1	01	7/24/19	07:50	S	1				X		
06-01-2.5-3	02		08:42		1						
06-01-5-5.5	03		10:49		1						
06-01-10-10.5	04		11:06		1						
06-01-15-16	05		11:10		1						
06-01-20-20.25	06		11:15		1						
06-02-0-1 ~~2.5-2.75~~	07		07:55		1						
06-02-2.5-2.75	08		11:45		1						
06-02-5-5.25'	09		11:55		1						
06-02-10-10.25'	10		12:00		1						
06-02-15-15.25'	11		12:05		1						
06-02-20-20.25	12		12:15		1						
06-03-0-1	13		08:05		1						
06-03-1-1.5	14		08:15		1						
06-03-2.5-2.75	15	↓	13:20	↓	1				↓		
TOTAL											

RELINQUISHED BY:(Signature) DATE/TIME 7/29/19 16:30 RECEIVED BY: (Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 7/30/19 0845 RECEIVED BY: (Signature) Jadon Tinek

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

LABORATORY: DHL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 3.5°C THERM#: 18
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☑ HAND DELIVERED

№ 0123

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants

507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 7-24-2019 PAGE 2 OF 2
PO#: LAB WORK ORDER#: 1907387
PROJECT LOCATION OR NAME: AKA Energy / Empire Abo
LAI PROJECT #: 6-01N1-11 COLLECTOR: RW/ML

TRRP report? ☐ Yes ☑ No
TIME ZONE: Time zone/State: Mtn / NM
S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☐ MTBE ☐ TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐ TBLP - METALS (RCRA) ☐ TCLP VOC ☐ TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ TOTAL METALS (RCRA) ☐ OTHER LIST ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDES ☐ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
06-03-5-5-25	16	7/24/19	13:25	S	1				X		X X X	
06-03-10-10-25	17		13:30		1							
06-03-15-15-25	18		13:40		1							
06-03-20-21	19		13:45		1							
06-03-25-25.5	20	↓	14:00	↓	1				↓		↓ ↓ ↓	
←									End		→	
TOTAL					20							

RELINQUISHED BY:(Signature) DATE/TIME 7/29/19 16:30 RECEIVED BY: (Signature) LBO
RELINQUISHED BY:(Signature) LBO DATE/TIME 7/30/19 0845 RECEIVED BY: (Signature) Jaden Hines
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)
LABORATORY: Xenco

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 3.5 THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

LSO

WWW.LSO.COM
Questions? Call 800-800-8984

Airbill No. LSO0BYG4

LSO0BYG4

1. To: Print Name (Person) | Phone (Important)

Company Name

Street Address (No P.O. Box or P.O. Box Zip Code Deliveries)

Suite / Floor

City | State | Zip

2. From: Print Name (Person) | Phone (Important)

Company Name

Street Address

Suite / Floor

City | State | Zip

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- ☒ LSO Priority Overnight* By 10:30 a.m. to most cities
- ☐ LSO Early Overnight* By 8:30 a.m. select cities
- ☐ LSO Economy Next Day* By 3 p.m. to most cities
- ☐ LSO 2nd Day*
- ☐ LSO Ground
- ☐ LSO Saturday*
- ☐ Other

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

☐ Deliver Without Delivery Signature (See Limits of Liability below)

Release Signature

L x W x H

4. Package: Weight:

Your Company's Billing Reference Information

Ship Date: (mm/dd/yy)

5. Payment:

FOR DRIVER USE ONLY

Driver Number

☐ Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location

Date:

Time:

City Code:

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY. See LSO Service Guide for further details.

CUSTODY SEAL
DATE
SIGNATURE

QEC
Quality Environmental Containers
800-255-3950 • www.qecusa.com
2019

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates Date Received: 7/30/2019

Work Order Number 1907387 Received by JW

Checklist completed by: _____ 7/30/2019 Reviewed by _____ 7/30/2019
Signature Date Initials Date

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	3.5 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

DHL Analytical, Inc. **Date:** *19-Aug-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1907387

CASE NARRATIVE

Sample was analyzed using the methods outlined in the following references:

Method SW9056A - Anions Analysis
Method SW8260C - Volatile Organics Analysis
Method CWG/1005 - Total Petroleum Hydrocarbons Analysis
Method D2216 - Percent Moisture Analysis

LOG IN

The samples were received and log-in performed on 7/30/19. A total of 20 samples were received. For further login notes please refer to the Chain-of-Custody. The samples arrived in good condition and were properly packaged.

CWG/1005 ANALYSIS

For TPH analysis performed on 8/2/19 the surrogate recoveries for five samples were above control limits for Isopropylbenzene and/or Octacosane at various dilutions. These are flagged accordingly. This was due to the surrogate(s) co-eluting with the samples. No further corrective actions were taken.

VOLATILE ORGANICS ANALYSIS

As per the NELAP accreditation requirement the following must be noted: NMED guidance on the collection of soil for VOC analysis requires the use of Method 5035 and will reject VOC data reported for soil samples collected and prepared using another method. NELAP requires a note that if 5035 sampling method for VOCs is not utilized, the results of samples collected in bulk containers for low level volatile components may be compromised. The client has been notified and has requested the Laboratory to proceed with analysis; these results are "C" flagged in the Analytical Data Report.

For Volatiles analysis performed on 7/30/19 the surrogate recoveries for samples 06-02-0-1 and 06-03-0-1were above control limits for 4-Bromofluorobenzene and Toluene-d8 at various dilutions. These are flagged accordingly. The remaining surrogates were within control limits. No further corrective actions were taken.

ANIONS ANALYSIS

For Anions analysis performed on 8/5/19 the samples and sample duplicates had the RPDs above control limits for Chloride. This was due to matrix effect. These are flagged accordingly in the QC summary report. All other QC was within control limits. No further corrective actions were taken.

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1907387

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1907387-01	06-01-0-1		07/24/19 07:50 AM	7/30/2019
1907387-02	06-01-2.5-3		07/24/19 10:42 AM	7/30/2019
1907387-03	06-01-5-5.5		07/24/19 10:49 AM	7/30/2019
1907387-04	06-01-10-10.5		07/24/19 11:00 AM	7/30/2019
1907387-05	06-01-15-16		07/24/19 11:10 AM	7/30/2019
1907387-06	06-01-20-20.25		07/24/19 11:15 AM	7/30/2019
1907387-07	06-02-0-1		07/24/19 07:55 AM	7/30/2019
1907387-08	06-02-2.5-2.75		07/24/19 11:45 AM	7/30/2019
1907387-09	06-02-5-5.25		07/24/19 11:55 AM	7/30/2019
1907387-10	06-02-10-10.25		07/24/19 12:00 PM	7/30/2019
1907387-11	06-02-15-15.25		07/24/19 12:05 PM	7/30/2019
1907387-12	06-02-20-20.25		07/24/19 12:15 PM	7/30/2019
1907387-13	06-03-0-1		07/24/19 08:05 AM	7/30/2019
1907387-14	06-03-1-1.5		07/24/19 08:13 AM	7/30/2019
1907387-15	06-03-2.5-2.75		07/24/19 01:20 PM	7/30/2019
1907387-16	06-03-5-5.25		07/24/19 01:25 PM	7/30/2019
1907387-17	06-03-10-10.25		07/24/19 01:30 PM	7/30/2019
1907387-18	06-03-15-15.25		07/24/19 01:40 PM	7/30/2019
1907387-19	06-03-20-21		07/24/19 01:45 PM	7/30/2019
1907387-20	06-03-25-25.25		07/24/19 02:00 PM	7/30/2019

Released to Imaging: 4/3/2023 3:36:09 PM
Received by OCD: 4/3/2023 2:46:30 PM

Lab Order: 1907387
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907387-01A	06-01-0-1	07/24/19 07:50 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-01-0-1	07/24/19 07:50 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-01-0-1	07/24/19 07:50 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	06-01-0-1	07/24/19 07:50 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-02A	06-01-2.5-3	07/24/19 10:42 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-01-2.5-3	07/24/19 10:42 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-01-2.5-3	07/24/19 10:42 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
	06-01-2.5-3	07/24/19 10:42 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-03A	06-01-5-5.5	07/24/19 10:49 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-01-5-5.5	07/24/19 10:49 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-01-5-5.5	07/24/19 10:49 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-04A	06-01-10-10.5	07/24/19 11:00 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-01-10-10.5	07/24/19 11:00 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-01-10-10.5	07/24/19 11:00 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-05A	06-01-15-16	07/24/19 11:10 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-01-15-16	07/24/19 11:10 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-01-15-16	07/24/19 11:10 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-07A	06-02-0-1	07/24/19 07:55 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-02-0-1	07/24/19 07:55 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-02-0-1	07/24/19 07:55 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	06-02-0-1	07/24/19 07:55 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 03:06 PM	92047
	06-02-0-1	07/24/19 07:55 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-08A	06-02-2.5-2.75	07/24/19 11:45 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-02-2.5-2.75	07/24/19 11:45 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-02-2.5-2.75	07/24/19 11:45 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-09A	06-02-5-5.25	07/24/19 11:55 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-02-5-5.25	07/24/19 11:55 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-02-5-5.25	07/24/19 11:55 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104

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Lab Order: 1907387
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907387-10A	06-02-10-10.25	07/24/19 12:00 PM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-02-10-10.25	07/24/19 12:00 PM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-02-10-10.25	07/24/19 12:00 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-11A	06-02-15-15.25	07/24/19 12:05 PM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-02-15-15.25	07/24/19 12:05 PM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-02-15-15.25	07/24/19 12:05 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-13A	06-03-0-1	07/24/19 08:05 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-03-0-1	07/24/19 08:05 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-03-0-1	07/24/19 08:05 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	06-03-0-1	07/24/19 08:05 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 03:06 PM	92047
	06-03-0-1	07/24/19 08:05 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-14A	06-03-1-1.5	07/24/19 08:13 AM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-03-1-1.5	07/24/19 08:13 AM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-03-1-1.5	07/24/19 08:13 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
	06-03-1-1.5	07/24/19 08:13 AM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-15A	06-03-2.5-2.75	07/24/19 01:20 PM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-03-2.5-2.75	07/24/19 01:20 PM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-03-2.5-2.75	07/24/19 01:20 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
	06-03-2.5-2.75	07/24/19 01:20 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-16A	06-03-5-5.25	07/24/19 01:25 PM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-03-5-5.25	07/24/19 01:25 PM	Soil	D2216	Moisture Preparation	08/02/19 02:44 PM	92136
	06-03-5-5.25	07/24/19 01:25 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-17A	06-03-10-10.25	07/24/19 01:30 PM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-03-10-10.25	07/24/19 01:30 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	06-03-10-10.25	07/24/19 01:30 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
	06-03-10-10.25	07/24/19 01:30 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-18A	06-03-15-15.25	07/24/19 01:40 PM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-03-15-15.25	07/24/19 01:40 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137

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19-Aug-19

Lab Order: 1907387
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907387-18A	06-03-15-15.25	07/24/19 01:40 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-19A	06-03-20-21	07/24/19 01:45 PM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-03-20-21	07/24/19 01:45 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	06-03-20-21	07/24/19 01:45 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104
1907387-20A	06-03-25-25.25	07/24/19 02:00 PM	Soil	SW9056A	Anion Prep	08/05/19 08:31 AM	92075
	06-03-25-25.25	07/24/19 02:00 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	06-03-25-25.25	07/24/19 02:00 PM	Soil	TX1005	TX1005 Soil Prep	08/01/19 01:43 PM	92104

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Lab Order: 1907387
Client: Larson & Associates
Project: AKA Energy/Empire ABO

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907387-01A	06-01-0-1	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 07:14 PM	GCMS2_190730A
	06-01-0-1	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 12:23 PM	IC2_190805A
	06-01-0-1	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-01-0-1	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 09:38 AM	GC12_190802A
1907387-02A	06-01-2.5-3	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 12:39 PM	IC2_190805A
	06-01-2.5-3	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-01-2.5-3	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 09:47 AM	GC12_190802A
	06-01-2.5-3	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 10:29 AM	GC12_190802A
1907387-03A	06-01-5-5.5	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 12:55 PM	IC2_190805A
	06-01-5-5.5	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-01-5-5.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 09:56 AM	GC12_190802A
1907387-04A	06-01-10-10.5	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 01:11 PM	IC2_190805A
	06-01-10-10.5	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-01-10-10.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 10:05 AM	GC12_190802A
1907387-05A	06-01-15-16	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 01:27 PM	IC2_190805A
	06-01-15-16	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-01-15-16	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 10:14 AM	GC12_190802A
1907387-07A	06-02-0-1	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92047	50	07/30/19 08:14 PM	GCMS1_190730B
	06-02-0-1	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 05:21 PM	GCMS2_190730A
	06-02-0-1	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 01:43 PM	IC2_190805A
	06-02-0-1	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-02-0-1	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	5	08/02/19 01:07 PM	GC12_190802A
1907387-08A	06-02-2.5-2.75	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 01:59 PM	IC2_190805A
	06-02-2.5-2.75	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-02-2.5-2.75	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 10:37 AM	GC12_190802A
1907387-09A	06-02-5-5.25	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 02:15 PM	IC2_190805A
	06-02-5-5.25	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-02-5-5.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 10:46 AM	GC12_190802A

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Lab Order: 1907387
Client: Larson & Associates
Project: AKA Energy/Empire ABO

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907387-10A	06-02-10-10.25	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 02:31 PM	IC2_190805A
	06-02-10-10.25	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-02-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 10:55 AM	GC12_190802A
1907387-11A	06-02-15-15.25	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 02:47 PM	IC2_190805A
	06-02-15-15.25	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-02-15-15.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 11:04 AM	GC12_190802A
1907387-13A	06-03-0-1	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92047	50	07/30/19 08:45 PM	GCMS1_190730B
	06-03-0-1	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 05:50 PM	GCMS2_190730A
	06-03-0-1	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 04:35 PM	IC2_190805A
	06-03-0-1	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-03-0-1	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	2	08/02/19 01:16 PM	GC12_190802A
1907387-14A	06-03-1-1.5	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 04:51 PM	IC2_190805A
	06-03-1-1.5	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-03-1-1.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	2	08/02/19 01:34 PM	GC12_190802A
	06-03-1-1.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	20	08/02/19 02:28 PM	GC12_190802A
1907387-15A	06-03-2.5-2.75	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 05:07 PM	IC2_190805A
	06-03-2.5-2.75	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-03-2.5-2.75	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	20	08/02/19 02:46 PM	GC12_190802A
	06-03-2.5-2.75	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	2	08/02/19 01:52 PM	GC12_190802A
1907387-16A	06-03-5-5.25	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 05:23 PM	IC2_190805A
	06-03-5-5.25	Soil	D2216	Percent Moisture	92136	1	08/05/19 08:45 AM	PMOIST_190802B
	06-03-5-5.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 11:13 AM	GC12_190802A
1907387-17A	06-03-10-10.25	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 05:39 PM	IC2_190805A
	06-03-10-10.25	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	06-03-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 11:22 AM	GC12_190802A
	06-03-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 12:43 PM	GC12_190802A
1907387-18A	06-03-15-15.25	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 05:55 PM	IC2_190805A
	06-03-15-15.25	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C

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Lab Order: 1907387
Client: Larson & Associates
Project: AKA Energy/Empire ABO

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907387-18A	06-03-15-15.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 11:31 AM	GC12_190802A
1907387-19A	06-03-20-21	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 06:11 PM	IC2_190805A
	06-03-20-21	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	06-03-20-21	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 11:40 AM	GC12_190802A
1907387-20A	06-03-25-25.25	Soil	SW9056A	Anions by IC method - Soil	92075	10	08/05/19 06:27 PM	IC2_190805A
	06-03-25-25.25	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	06-03-25-25.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92104	1	08/02/19 11:49 AM	GC12_190802A

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-01-0-1
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-01
Project No:	6-0141-11	**Collection Date:**	07/24/19 07:50 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.36	7.36	21.0		mg/Kg-dry	1	08/02/19 09:38 AM
TPH-DRO >C10-C28	226	7.36	21.0		mg/Kg-dry	1	08/02/19 09:38 AM
TPH-ORO >C28-C35	85.5	7.36	21.0		mg/Kg-dry	1	08/02/19 09:38 AM
T/R Hydrocarbons: C6-C35	311	7.36	21.0		mg/Kg-dry	1	08/02/19 09:38 AM
Surr: Isopropylbenzene	87.4	0	70-130		%REC	1	08/02/19 09:38 AM
Surr: Octacosane	152	0	70-130	S	%REC	1	08/02/19 09:38 AM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	<0.00101	0.00101	0.00505	C	mg/Kg-dry	1	07/30/19 07:14 PM
Ethylbenzene	<0.00101	0.00101	0.00505	C	mg/Kg-dry	1	07/30/19 07:14 PM
Toluene	<0.00101	0.00101	0.00505	C	mg/Kg-dry	1	07/30/19 07:14 PM
Total Xylenes	<0.00101	0.00101	0.00505	C	mg/Kg-dry	1	07/30/19 07:14 PM
Surr: 1,2-Dichloroethane-d4	93.0	0	52-149		%REC	1	07/30/19 07:14 PM
Surr: 4-Bromofluorobenzene	97.8	0	84-118		%REC	1	07/30/19 07:14 PM
Surr: Dibromofluoromethane	99.6	0	65-135		%REC	1	07/30/19 07:14 PM
Surr: Toluene-d8	92.5	0	84-116		%REC	1	07/30/19 07:14 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	1070	21.3	53.3		mg/Kg-dry	10	08/05/19 12:23 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	8.25	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-01-2.5-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-02
Project No:	6-0141-11	**Collection Date:**	07/24/19 10:42 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.29	9.29	26.6		mg/Kg-dry	1	08/02/19 10:29 AM
TPH-DRO >C10-C28	<9.29	9.29	26.6		mg/Kg-dry	1	08/02/19 10:29 AM
TPH-ORO >C28-C35	<9.29	9.29	26.6		mg/Kg-dry	1	08/02/19 10:29 AM
T/R Hydrocarbons: C6-C35	<9.29	9.29	26.6		mg/Kg-dry	1	08/02/19 10:29 AM
Surr: Isopropylbenzene	90.9	0	70-130		%REC	1	08/02/19 10:29 AM
Surr: Octacosane	98.1	0	70-130		%REC	1	08/02/19 10:29 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	37.3	26.3	65.7	J	mg/Kg-dry	10	08/05/19 12:39 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	24.8	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-01-5-5.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-03
Project No:	6-0141-11	**Collection Date:**	07/24/19 10:49 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.22	8.22	23.5		mg/Kg-dry	1	08/02/19 09:56 AM
TPH-DRO >C10-C28	<8.22	8.22	23.5		mg/Kg-dry	1	08/02/19 09:56 AM
TPH-ORO >C28-C35	<8.22	8.22	23.5		mg/Kg-dry	1	08/02/19 09:56 AM
T/R Hydrocarbons: C6-C35	<8.22	8.22	23.5		mg/Kg-dry	1	08/02/19 09:56 AM
Surr: Isopropylbenzene	93.9	0	70-130		%REC	1	08/02/19 09:56 AM
Surr: Octacosane	100	0	70-130		%REC	1	08/02/19 09:56 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<23.2	23.2	58.0		mg/Kg-dry	10	08/05/19 12:55 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	19.6	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-01-10-10.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-04
Project No:	6-0141-11	**Collection Date:**	07/24/19 11:00 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.26	9.26	26.5		mg/Kg-dry	1	08/02/19 10:05 AM
TPH-DRO >C10-C28	<9.26	9.26	26.5		mg/Kg-dry	1	08/02/19 10:05 AM
TPH-ORO >C28-C35	<9.26	9.26	26.5		mg/Kg-dry	1	08/02/19 10:05 AM
T/R Hydrocarbons: C6-C35	<9.26	9.26	26.5		mg/Kg-dry	1	08/02/19 10:05 AM
Surr: Isopropylbenzene	71.7	0	70-130		%REC	1	08/02/19 10:05 AM
Surr: Octacosane	104	0	70-130		%REC	1	08/02/19 10:05 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	34.6	28.4	70.9	J	mg/Kg-dry	10	08/05/19 01:11 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	31.6	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-01-15-16
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-05
Project No:	6-0141-11	**Collection Date:**	07/24/19 11:10 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.33	8.33	23.8		mg/Kg-dry	1	08/02/19 10:14 AM
TPH-DRO >C10-C28	<8.33	8.33	23.8		mg/Kg-dry	1	08/02/19 10:14 AM
TPH-ORO >C28-C35	<8.33	8.33	23.8		mg/Kg-dry	1	08/02/19 10:14 AM
T/R Hydrocarbons: C6-C35	<8.33	8.33	23.8		mg/Kg-dry	1	08/02/19 10:14 AM
Surr: Isopropylbenzene	90.0	0	70-130		%REC	1	08/02/19 10:14 AM
Surr: Octacosane	101	0	70-130		%REC	1	08/02/19 10:14 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	25.2	22.5	56.2	J	mg/Kg-dry	10	08/05/19 01:27 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	16.6	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-02-0-1
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-07
Project No:	6-0141-11	**Collection Date:**	07/24/19 07:55 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	1330	41.4	118		mg/Kg-dry	5	08/02/19 01:07 PM
TPH-DRO >C10-C28	5860	41.4	118		mg/Kg-dry	5	08/02/19 01:07 PM
TPH-ORO >C28-C35	1800	41.4	118		mg/Kg-dry	5	08/02/19 01:07 PM
T/R Hydrocarbons: C6-C35	8980	41.4	118		mg/Kg-dry	5	08/02/19 01:07 PM
Surr: Isopropylbenzene	228	0	70-130	S	%REC	5	08/02/19 01:07 PM
Surr: Octacosane	502	0	70-130	S	%REC	5	08/02/19 01:07 PM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	0.0172	0.00139	0.00696	C	mg/Kg-dry	1	07/30/19 05:21 PM
Ethylbenzene	8.43	0.0630	0.315	C	mg/Kg-dry	50	07/30/19 08:14 PM
Toluene	<0.00139	0.00139	0.00696	C	mg/Kg-dry	1	07/30/19 05:21 PM
Total Xylenes	<0.00139	0.00139	0.00696	C	mg/Kg-dry	1	07/30/19 05:21 PM
Surr: 1,2-Dichloroethane-d4	85.0	0	52-149		%REC	1	07/30/19 05:21 PM
Surr: 1,2-Dichloroethane-d4	77.1	0	52-149		%REC	50	07/30/19 08:14 PM
Surr: 4-Bromofluorobenzene	380	0	84-118	S	%REC	1	07/30/19 05:21 PM
Surr: 4-Bromofluorobenzene	133	0	84-118	S	%REC	50	07/30/19 08:14 PM
Surr: Dibromofluoromethane	93.5	0	65-135		%REC	1	07/30/19 05:21 PM
Surr: Dibromofluoromethane	89.5	0	65-135		%REC	50	07/30/19 08:14 PM
Surr: Toluene-d8	130	0	84-116	S	%REC	1	07/30/19 05:21 PM
Surr: Toluene-d8	119	0	84-116	S	%REC	50	07/30/19 08:14 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<27.8	27.8	69.5		mg/Kg-dry	10	08/05/19 01:43 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	29.4	0	0		WT%	1	08/05/19 08:45 AM

Qualifiers:

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-02-2.5-2.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-08
Project No:	6-0141-11	**Collection Date:**	07/24/19 11:45 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.55	8.55	24.4		mg/Kg-dry	1	08/02/19 10:37 AM
TPH-DRO >C10-C28	95.0	8.55	24.4		mg/Kg-dry	1	08/02/19 10:37 AM
TPH-ORO >C28-C35	<8.55	8.55	24.4		mg/Kg-dry	1	08/02/19 10:37 AM
T/R Hydrocarbons: C6-C35	95.0	8.55	24.4		mg/Kg-dry	1	08/02/19 10:37 AM
Surr: Isopropylbenzene	85.0	0	70-130		%REC	1	08/02/19 10:37 AM
Surr: Octacosane	104	0	70-130		%REC	1	08/02/19 10:37 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	79.6	27.7	69.1		mg/Kg-dry	10	08/05/19 01:59 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	28.4	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-02-5-5.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-09
Project No:	6-0141-11	**Collection Date:**	07/24/19 11:55 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<10.3	10.3	29.3		mg/Kg-dry	1	08/02/19 10:46 AM
TPH-DRO >C10-C28	<10.3	10.3	29.3		mg/Kg-dry	1	08/02/19 10:46 AM
TPH-ORO >C28-C35	<10.3	10.3	29.3		mg/Kg-dry	1	08/02/19 10:46 AM
T/R Hydrocarbons: C6-C35	<10.3	10.3	29.3		mg/Kg-dry	1	08/02/19 10:46 AM
Surr: Isopropylbenzene	74.8	0	70-130		%REC	1	08/02/19 10:46 AM
Surr: Octacosane	100	0	70-130		%REC	1	08/02/19 10:46 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<29.2	29.2	72.9		mg/Kg-dry	10	08/05/19 02:15 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	33.1	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-02-10-10.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-10
Project No:	6-0141-11	**Collection Date:**	07/24/19 12:00 PM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.97	8.97	25.6		mg/Kg-dry	1	08/02/19 10:55 AM
TPH-DRO >C10-C28	<8.97	8.97	25.6		mg/Kg-dry	1	08/02/19 10:55 AM
TPH-ORO >C28-C35	<8.97	8.97	25.6		mg/Kg-dry	1	08/02/19 10:55 AM
T/R Hydrocarbons: C6-C35	<8.97	8.97	25.6		mg/Kg-dry	1	08/02/19 10:55 AM
Surr: Isopropylbenzene	85.6	0	70-130		%REC	1	08/02/19 10:55 AM
Surr: Octacosane	107	0	70-130		%REC	1	08/02/19 10:55 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	27.8	26.7	66.7	J	mg/Kg-dry	10	08/05/19 02:31 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	28.4	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-02-15-15.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-11
Project No:	6-0141-11	**Collection Date:**	07/24/19 12:05 PM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.72	7.72	22.1		mg/Kg-dry	1	08/02/19 11:04 AM
TPH-DRO >C10-C28	<7.72	7.72	22.1		mg/Kg-dry	1	08/02/19 11:04 AM
TPH-ORO >C28-C35	<7.72	7.72	22.1		mg/Kg-dry	1	08/02/19 11:04 AM
T/R Hydrocarbons: C6-C35	<7.72	7.72	22.1		mg/Kg-dry	1	08/02/19 11:04 AM
Surr: Isopropylbenzene	94.4	0	70-130		%REC	1	08/02/19 11:04 AM
Surr: Octacosane	110	0	70-130		%REC	1	08/02/19 11:04 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	60.9	22.5	56.2		mg/Kg-dry	10	08/05/19 02:47 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	12.6	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-03-0-1
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-13
Project No:	6-0141-11	**Collection Date:**	07/24/19 08:05 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	124	18.1	51.7		mg/Kg-dry	2	08/02/19 01:16 PM
TPH-DRO >C10-C28	1190	18.1	51.7		mg/Kg-dry	2	08/02/19 01:16 PM
TPH-ORO >C28-C35	1080	18.1	51.7		mg/Kg-dry	2	08/02/19 01:16 PM
T/R Hydrocarbons: C6-C35	2390	18.1	51.7		mg/Kg-dry	2	08/02/19 01:16 PM
Surr: Isopropylbenzene	96.5	0	70-130		%REC	2	08/02/19 01:16 PM
Surr: Octacosane	304	0	70-130	S	%REC	2	08/02/19 01:16 PM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	0.00871	0.00128	0.00639	C	mg/Kg-dry	1	07/30/19 05:50 PM
Ethylbenzene	1.84	0.0605	0.302	C	mg/Kg-dry	50	07/30/19 08:45 PM
Toluene	<0.00128	0.00128	0.00639	C	mg/Kg-dry	1	07/30/19 05:50 PM
Total Xylenes	<0.00128	0.00128	0.00639	C	mg/Kg-dry	1	07/30/19 05:50 PM
Surr: 1,2-Dichloroethane-d4	89.6	0	52-149		%REC	1	07/30/19 05:50 PM
Surr: 1,2-Dichloroethane-d4	77.5	0	52-149		%REC	50	07/30/19 08:45 PM
Surr: 4-Bromofluorobenzene	124	0	84-118	S	%REC	1	07/30/19 05:50 PM
Surr: 4-Bromofluorobenzene	104	0	84-118		%REC	50	07/30/19 08:45 PM
Surr: Dibromofluoromethane	96.8	0	65-135		%REC	1	07/30/19 05:50 PM
Surr: Dibromofluoromethane	91.2	0	65-135		%REC	50	07/30/19 08:45 PM
Surr: Toluene-d8	125	0	84-116	S	%REC	1	07/30/19 05:50 PM
Surr: Toluene-d8	95.2	0	84-116		%REC	50	07/30/19 08:45 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<25.9	25.9	64.8		mg/Kg-dry	10	08/05/19 04:35 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	23.6	0	0		WT%	1	08/05/19 08:45 AM

Qualifiers:

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-03-1-1.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-14
Project No:	6-0141-11	**Collection Date:**	07/24/19 08:13 AM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	1320	188	538		mg/Kg-dry	20	08/02/19 02:28 PM
TPH-DRO >C10-C28	5740	188	538		mg/Kg-dry	20	08/02/19 02:28 PM
TPH-ORO >C28-C35	2120	188	538		mg/Kg-dry	20	08/02/19 02:28 PM
T/R Hydrocarbons: C6-C35	9180	188	538		mg/Kg-dry	20	08/02/19 02:28 PM
Surr: Isopropylbenzene	214	0	70-130	S	%REC	20	08/02/19 02:28 PM
Surr: Octacosane	487	0	70-130	S	%REC	20	08/02/19 02:28 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	30.0	26.7	66.7	J	mg/Kg-dry	10	08/05/19 04:51 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	29.5	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-03-2.5-2.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-15
Project No:	6-0141-11	**Collection Date:**	07/24/19 01:20 PM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	3210	180	515		mg/Kg-dry	20	08/02/19 02:46 PM
TPH-DRO >C10-C28	4460	180	515		mg/Kg-dry	20	08/02/19 02:46 PM
TPH-ORO >C28-C35	816	180	515		mg/Kg-dry	20	08/02/19 02:46 PM
T/R Hydrocarbons: C6-C35	8490	180	515		mg/Kg-dry	20	08/02/19 02:46 PM
Surr: Isopropylbenzene	326	0	70-130	S	%REC	20	08/02/19 02:46 PM
Surr: Octacosane	441	0	70-130	S	%REC	20	08/02/19 02:46 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	95.0	27.1	67.8		mg/Kg-dry	10	08/05/19 05:07 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	27.7	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-03-5-5.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-16
Project No:	6-0141-11	**Collection Date:**	07/24/19 01:25 PM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.72	8.72	24.9		mg/Kg-dry	1	08/02/19 11:13 AM
TPH-DRO >C10-C28	76.6	8.72	24.9		mg/Kg-dry	1	08/02/19 11:13 AM
TPH-ORO >C28-C35	<8.72	8.72	24.9		mg/Kg-dry	1	08/02/19 11:13 AM
T/R Hydrocarbons: C6-C35	76.6	8.72	24.9		mg/Kg-dry	1	08/02/19 11:13 AM
Surr: Isopropylbenzene	97.8	0	70-130		%REC	1	08/02/19 11:13 AM
Surr: Octacosane	115	0	70-130		%REC	1	08/02/19 11:13 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<23.7	23.7	59.2		mg/Kg-dry	10	08/05/19 05:23 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	20.0	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-03-10-10.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-17
Project No:	6-0141-11	**Collection Date:**	07/24/19 01:30 PM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.16	9.16	26.2		mg/Kg-dry	1	08/02/19 12:43 PM
TPH-DRO >C10-C28	<9.16	9.16	26.2		mg/Kg-dry	1	08/02/19 12:43 PM
TPH-ORO >C28-C35	<9.16	9.16	26.2		mg/Kg-dry	1	08/02/19 12:43 PM
T/R Hydrocarbons: C6-C35	<9.16	9.16	26.2		mg/Kg-dry	1	08/02/19 12:43 PM
Surr: Isopropylbenzene	71.6	0	70-130		%REC	1	08/02/19 12:43 PM
Surr: Octacosane	100	0	70-130		%REC	1	08/02/19 12:43 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	39.6	28.8	71.9	J	mg/Kg-dry	10	08/05/19 05:39 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	31.6	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-03-15-15.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-18
Project No:	6-0141-11	**Collection Date:**	07/24/19 01:40 PM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.40	8.40	24.0		mg/Kg-dry	1	08/02/19 11:31 AM
TPH-DRO >C10-C28	50.6	8.40	24.0		mg/Kg-dry	1	08/02/19 11:31 AM
TPH-ORO >C28-C35	18.2	8.40	24.0	J	mg/Kg-dry	1	08/02/19 11:31 AM
T/R Hydrocarbons: C6-C35	68.8	8.40	24.0		mg/Kg-dry	1	08/02/19 11:31 AM
Surr: Isopropylbenzene	98.6	0	70-130		%REC	1	08/02/19 11:31 AM
Surr: Octacosane	119	0	70-130		%REC	1	08/02/19 11:31 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	24.6	24.5	61.3	J	mg/Kg-dry	10	08/05/19 05:55 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	20.4	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-03-20-21
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-19
Project No:	6-0141-11	**Collection Date:**	07/24/19 01:45 PM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	32.4	9.01	25.8		mg/Kg-dry	1	08/02/19 11:40 AM
TPH-DRO >C10-C28	217	9.01	25.8		mg/Kg-dry	1	08/02/19 11:40 AM
TPH-ORO >C28-C35	12.7	9.01	25.8	J	mg/Kg-dry	1	08/02/19 11:40 AM
T/R Hydrocarbons: C6-C35	262	9.01	25.8		mg/Kg-dry	1	08/02/19 11:40 AM
Surr: Isopropylbenzene	88.6	0	70-130		%REC	1	08/02/19 11:40 AM
Surr: Octacosane	119	0	70-130		%REC	1	08/02/19 11:40 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	30.2	25.3	63.3	J	mg/Kg-dry	10	08/05/19 06:11 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	22.4	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-03-25-25.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907387-20
Project No:	6-0141-11	**Collection Date:**	07/24/19 02:00 PM
Lab Order:	1907387	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.27	9.27	26.5		mg/Kg-dry	1	08/02/19 11:49 AM
TPH-DRO >C10-C28	<9.27	9.27	26.5		mg/Kg-dry	1	08/02/19 11:49 AM
TPH-ORO >C28-C35	<9.27	9.27	26.5		mg/Kg-dry	1	08/02/19 11:49 AM
T/R Hydrocarbons: C6-C35	<9.27	9.27	26.5		mg/Kg-dry	1	08/02/19 11:49 AM
Surr: Isopropylbenzene	95.5	0	70-130		%REC	1	08/02/19 11:49 AM
Surr: Octacosane	104	0	70-130		%REC	1	08/02/19 11:49 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	32.6	24.8	62.0	J	mg/Kg-dry	10	08/05/19 06:27 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	26.4	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *19-Aug-19*

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190802A

The QC data in batch 92104 applies to the following samples: 1907387-01A, 1907387-02A, 1907387-03A, 1907387-04A, 1907387-05A, 1907387-07A, 1907387-08A, 1907387-09A, 1907387-10A, 1907387-11A, 1907387-13A, 1907387-14A, 1907387-15A, 1907387-16A, 1907387-17A, 1907387-18A, 1907387-19A, 1907387-20A

Sample ID **MB-92104** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 9:05:48 AM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO C6-C10	<7.00	20.0								
TPH-DRO >C10-C28	<7.00	20.0								
TPH-ORO >C28-C35	<7.00	20.0								
T/R Hydrocarbons: C6-C35	<7.00	20.0								
Surr: Isopropylbenzene	24.6		25.00		98.3	70	130			
Surr: Octacosane	27.6		25.00		110	70	130			

Sample ID **LCS-92104** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 9:14:46 AM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	232	20.0	250.0	0	92.7	75	125			
Surr: Isopropylbenzene	24.1		25.00		96.6	70	130			
Surr: Octacosane	24.9		25.00		99.4	70	130			

Sample ID **LCSD-92104** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCSD** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 9:23:43 AM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	245	20.0	250.0	0	97.8	75	125	5.34	20	
Surr: Isopropylbenzene	25.0		25.00		99.8	70	130	0	0	
Surr: Octacosane	25.4		25.00		101	70	130	0	0	

Sample ID **1907385-02AMS** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 12:16:20 PM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	291	25.8	322.7	0	90.1	70	119			
Surr: Isopropylbenzene	26.8		32.27		83.1	70	130			
Surr: Octacosane	31.6		32.27		98.0	70	130			

Sample ID **1907385-02AMSD** Batch ID: **92104** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC12_190802A** Analysis Date: **8/2/2019 12:25:15 PM** Prep Date: **8/1/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	324	28.0	349.4	0	92.8	75	125	10.9	20	
Surr: Isopropylbenzene	33.3		34.94		95.4	70	130	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190802A

Sample ID **1907385-02AMSD**	Batch ID: **92104**	TestNo: **CWG/1005**	Units: **mg/Kg-dry**		
SampType: **MSD**	Run ID: **GC12_190802A**	Analysis Date: **8/2/2019 12:25:15 PM**	Prep Date: **8/1/2019**		

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Octacosane	37.2		34.94		106	70	130	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190802A

Sample ID **ICV-190802**	Batch ID: **R105523**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC12_190802A**	Analysis Date: **8/2/2019 8:52:53 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	935	20.0	1000	0	93.5	75	125			
Surr: Isopropylbenzene	50.5		50.00		101	70	130			
Surr: Octacosane	48.5		50.00		97.0	70	130			

Sample ID **CCV1-190802**	Batch ID: **R105523**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC12_190802A**	Analysis Date: **8/2/2019 3:04:30 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	486	20.0	500.0	0	97.3	75	125			
Surr: Isopropylbenzene	22.5		25.00		89.9	70	130			
Surr: Octacosane	22.1		25.00		88.3	70	130			

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_190730B

The QC data in batch 92047 applies to the following samples: 1907387-07A, 1907387-13A

Sample ID	LCS-92047 MEOH	Batch ID:	92047	TestNo:	SW8260C	Units:	mg/Kg
SampType:	LCS	Run ID:	GCMS1_190730B	Analysis Date:	7/30/2019 6:41:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	1.20	0.250	1.16	0	103	75	125			
Surr: 1,2-Dichloroethane-d4	2060		2500		82.2	52	149			
Surr: 4-Bromofluorobenzene	2420		2500		96.9	84	118			
Surr: Dibromofluoromethane	2360		2500		94.5	65	135			
Surr: Toluene-d8	2310		2500		92.4	84	116			

Sample ID	MB-92047 MEOH	Batch ID:	92047	TestNo:	SW8260C	Units:	mg/Kg
SampType:	MBLK	Run ID:	GCMS1_190730B	Analysis Date:	7/30/2019 7:12:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	<0.0500	0.250								
Surr: 1,2-Dichloroethane-d4	2000		2500		80.2	52	149			
Surr: 4-Bromofluorobenzene	2460		2500		98.2	84	118			
Surr: Dibromofluoromethane	2330		2500		93.2	65	135			
Surr: Toluene-d8	2300		2500		91.9	84	116			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_190730B

Sample ID	ICV-190730	Batch ID:	R105440	TestNo:	SW8260C	Units:	mg/Kg
SampType:	ICV	Run ID:	GCMS1_190730B	Analysis Date:	7/30/2019 11:59:00 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	0.0479	0.00500	0.0464	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	42.7		50.00		85.5	52	149			
Surr: 4-Bromofluorobenzene	52.6		50.00		105	84	118			
Surr: Dibromofluoromethane	46.8		50.00		93.7	65	135			
Surr: Toluene-d8	46.6		50.00		93.2	84	116			

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190730A

The QC data in batch 92040 applies to the following samples: 1907387-01A, 1907387-07A, 1907387-13A

Sample ID	LCS-92040	Batch ID:	92040	TestNo:	SW8260C	Units:	mg/Kg
SampType:	LCS	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 11:59:00 AM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0245	0.00500	0.0232	0	106	75	125			
Ethylbenzene	0.0225	0.00500	0.0232	0	97.0	75	125			
Toluene	0.0254	0.00500	0.0232	0	110	75	125			
Total Xylenes	0.0684	0.00500	0.0696	0	98.3	75	125			
Surr: 1,2-Dichloroethane-d4	44.8		50.00		89.5	52	149			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.1	84	118			
Surr: Dibromofluoromethane	51.3		50.00		103	65	135			
Surr: Toluene-d8	45.8		50.00		91.7	84	116			

Sample ID	MB-92040	Batch ID:	92040	TestNo:	SW8260C	Units:	mg/Kg
SampType:	MBLK	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 12:55:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.00100	0.00500								
Ethylbenzene	<0.00100	0.00500								
Toluene	<0.00100	0.00500								
Total Xylenes	<0.00100	0.00500								
Surr: 1,2-Dichloroethane-d4	44.2		50.00		88.3	52	149			
Surr: 4-Bromofluorobenzene	45.6		50.00		91.3	84	118			
Surr: Dibromofluoromethane	51.3		50.00		103	65	135			
Surr: Toluene-d8	46.8		50.00		93.6	84	116			

Sample ID	1907366-01AMS	Batch ID:	92040	TestNo:	SW8260C	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 2:28:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.160	0.0334	0.155	0	103	73	126			
Ethylbenzene	0.142	0.0334	0.155	0	91.5	74	127			
Toluene	0.165	0.0334	0.155	0	106	71	127			
Total Xylenes	0.432	0.0334	0.465	0	93.0	75	125			
Surr: 1,2-Dichloroethane-d4	323		334.0		96.7	52	149			
Surr: 4-Bromofluorobenzene	308		334.0		92.1	84	118			
Surr: Dibromofluoromethane	349		334.0		104	65	135			
Surr: Toluene-d8	300		334.0		89.9	84	116			

Sample ID	1907366-01AMSD	Batch ID:	92040	TestNo:	SW8260C	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 2:57:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.142	0.0324	0.150	0	94.6	73	126	11.6	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190730A

Sample ID **1907366-01AMSD**	Batch ID: **92040**	TestNo: **SW8260C**	Units: **mg/Kg-dry**		
SampType: **MSD**	Run ID: **GCMS2_190730A**	Analysis Date: **7/30/2019 2:57:00 PM**	Prep Date: **7/30/2019**		

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	0.133	0.0324	0.150	0	88.7	74	127	6.25	30	
Toluene	0.154	0.0324	0.150	0	103	71	127	6.65	30	
Total Xylenes	0.417	0.0324	0.451	0	92.6	75	125	3.50	30	
Surr: 1,2-Dichloroethane-d4	297		323.7		91.9	52	149	0	0	
Surr: 4-Bromofluorobenzene	294		323.7		90.8	84	118	0	0	
Surr: Dibromofluoromethane	333		323.7		103	65	135	0	0	
Surr: Toluene-d8	294		323.7		90.8	84	116	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190730A

Sample ID	ICV-190730	Batch ID:	R105439	TestNo:	SW8260C	Units:	mg/Kg
SampType:	ICV	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 11:18:00 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0474	0.00500	0.0464	0	102	80	120			
Ethylbenzene	0.0448	0.00500	0.0464	0	96.6	80	120			
Toluene	0.0495	0.00500	0.0464	0	107	80	120			
Total Xylenes	0.138	0.00500	0.139	0	99.0	80	120			
Surr: 1,2-Dichloroethane-d4	44.7		50.00		89.3	52	149			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.3	84	118			
Surr: Dibromofluoromethane	50.1		50.00		100	65	135			
Surr: Toluene-d8	45.8		50.00		91.6	84	116			

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190805A

The QC data in batch 92075 applies to the following samples: 1907387-01A, 1907387-02A, 1907387-03A, 1907387-04A, 1907387-05A, 1907387-07A, 1907387-08A, 1907387-09A, 1907387-10A, 1907387-11A, 1907387-13A, 1907387-14A, 1907387-15A, 1907387-16A, 1907387-17A, 1907387-18A, 1907387-19A, 1907387-20A

Sample ID **MB-92075** Batch ID: **92075** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **IC2_190805A** Analysis Date: **8/5/2019 9:48:36 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<2.00	5.00								

Sample ID **LCS-92075** Batch ID: **92075** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **LCS** Run ID: **IC2_190805A** Analysis Date: **8/5/2019 10:20:36 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	52.2	5.00	50.00	0	104	80	120			

Sample ID **LCSD-92075** Batch ID: **92075** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **LCSD** Run ID: **IC2_190805A** Analysis Date: **8/5/2019 10:36:36 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	52.2	5.00	50.00	0	104	80	120	0.075	15	

Sample ID **1907387-02A-DUP** Batch ID: **92075** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **DUP** Run ID: **IC2_190805A** Analysis Date: **8/5/2019 7:15:15 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	28.6	63.5	0	37.27				26.4	10	R

Sample ID **1907387-18A-DUP** Batch ID: **92075** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **DUP** Run ID: **IC2_190805A** Analysis Date: **8/5/2019 7:31:15 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	34.9	59.1	0	24.58				34.6	10	R

Sample ID **1907387-02AMS** Batch ID: **92075** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **IC2_190805A** Analysis Date: **8/5/2019 7:47:15 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	148	66.2	132.4	37.27	84.0	80	120			

Sample ID **1907387-02AMSD** Batch ID: **92075** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **IC2_190805A** Analysis Date: **8/5/2019 8:03:15 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	154	65.8	131.6	37.27	88.4	80	120	3.35	15	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190805A

Sample ID	**ICV-190805**	Batch ID:	**R105573**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**ICV**	Run ID:	**IC2_190805A**	Analysis Date:	**8/5/2019 9:16:36 AM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	27.0	5.00	25.00	0	108	90	110			

Sample ID	**CCV1-190805**	Batch ID:	**R105573**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**CCV**	Run ID:	**IC2_190805A**	Analysis Date:	**8/5/2019 3:51:54 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.5	5.00	10.00	0	105	90	110			

Sample ID	**CCV2-190805**	Batch ID:	**R105573**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**CCV**	Run ID:	**IC2_190805A**	Analysis Date:	**8/5/2019 9:07:15 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.6	5.00	10.00	0	106	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190802B**

The QC data in batch 92136 applies to the following samples: 1907387-01A, 1907387-02A, 1907387-03A, 1907387-04A, 1907387-05A, 1907387-07A, 1907387-08A, 1907387-09A, 1907387-10A, 1907387-11A, 1907387-13A, 1907387-14A, 1907387-15A, 1907387-16A

Sample ID **1907387-16A-DUP** Batch ID: **92136** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190802B** Analysis Date: **8/5/2019 8:45:00 AM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	19.7	0	0	19.97				1.34	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907387
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190802C**

The QC data in batch 92137 applies to the following samples: 1907387-17A, 1907387-18A, 1907387-19A, 1907387-20A

Sample ID **1907389-35A-DUP** Batch ID: **92137** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190802C** Analysis Date: **8/5/2019 8:45:00 AM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	37.0	0	0	35.48				4.14	30	

Qualifiers:

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

August 30, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1907389

RE: AKA Energy/Empire ABO

Dear Mark Larson:

DHL Analytical, Inc. received 61 sample(s) on 7/30/2019 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

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

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№ 0124

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 7-25-19 PAGE 1 OF 4
PO#: LAB WORK ORDER#: 1907389
PROJECT LOCATION OR NAME: AKA Energy / Empire Abo
LAI PROJECT #: L-01442-11 COLLECTOR: RM/ML

TRRP report? ☐ Yes ☑ No
TIME ZONE: Time zone/State: Mtn/ NM
S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☑ MTBE ☐	TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL - MOD 8015 ☐	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDES ☐ ANIONS ☐ ALKALINITY ☐	MEA/DEA	FIELD NOTES
06-04-0-1	01	7/24/19	08:23	S	1				X																						
06-04-1-2	02	7/24/19	08:30		1																										
06-04-2.5-3	03	7/25/19	08:05		1																										
06-04-5-5.25	04	7/25/19	08:15		1																										
06-04-10-10.25	05		08:25		1																										
06-04-15-15.25	06		08:28		1																										
06-04-20-21	07	↓	08:30		1																									No Hold (Kb)	
06-05-0-1/2	08	7/24/19	08:40		1																									07/30/19	
06-05-1-1.25	09	7/24/19	09:05		1																										
06-05-2.5-3.5	10	7/25/19	09:00		1																										
06-05-5-5.25	11		09:05		1																										
06-05-10-10.25	12		09:15		1																										
06-05-15-15.25	13		09:20		1																										
06-05-20-21	14		09:25		1																										
03-01-0-2	15	↓	10:00	↓	1																										
TOTAL																															

RELINQUISHED BY:(Signature) DATE/TIME 7/24/19 16:30 RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature) DATE/TIME 7/30/19 0845 RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)
LABORATORY: DHL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.1°C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

Received by OCD: 4/3/2023 3:46:30 PM
Released to Imaging: 4/3/2023 3:36:09 PM

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№ 0125

CHAIN-OF-CUSTODY

Aarson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 7/25/19 PAGE 2 OF 4

PO#: LAB WORK ORDER#: 1907389

PROJECT LOCATION OR NAME: AKS Energy / Empire Abo

LAI PROJECT #: OL-141-L1 COLLECTOR: RN/ML

Data Reported to: Mark Larson

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MDT/NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
03-01-2.5-3.5	16	7/25/19	10:10	S	1				X		BTEX ☒ MTBE ☐ TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ TRPH ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐ TBLP - METALS (RCRA) ☐ TCLP VOC ☐ TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ TOTAL METALS (RCRA) ☐ OTHER LIST ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ CHLORIDE ☐ PECHLORATE ☐ ANIONS ☐ ALKALINITY ☐	
03-01-5-5.5	17		10:15		1							
03-01-7.5-8	18		10:20		1							
03-01-10-10.25	19		10:23		1							
03-02-0-2	20		10:37		1							
03-02-2.5-3	21		10:40		1							
03-02-5-5.25	22		10:45		1							
03-02-7.5-8	23		10:50		1							
03-02-10-10.25	24		10:55		1							
03-03-0-2	25		12:00		1							
03-03-2.5-3.5	26		12:05		1							
03-03-5-5.25	27		12:09		1							
03-03-7.5-7.75	28		12:12		1							
03-03-10-10.25	29		12:17		1							Hold (1) 07/30/19
03-04-0-2	30	↓	12:55	↓	1				↓			
TOTAL												

RELINQUISHED BY:(Signature) DATE/TIME 7/29/19 16:30 RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME 7/30/19 0845 RECEIVED BY: (Signature)

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

LABORATORY: DHL

TURN AROUND TIME
NORMAL ☒
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.0°C THERM#: 18
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☒ CARRIER BILL # Lone Star
☐ HAND DELIVERED

Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

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№ 0126

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 7-25-2019 PAGE 3 OF 4

PO#: LAB WORK ORDER#: 1907389

PROJECT LOCATION OR NAME: AKA Energy / Empire Abo

LAI PROJECT #: 16-0141-11 COLLECTOR: KN / ML

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: MTN / NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
03-04-2.5-4	31	7/25/19	13:00	S	1					X	BTEX ☐ MTBE ☐ TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☑ DIESEL - MOD 8015 ☑ OIL - MOD 8015 ☑ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐ TBLP - METALS (RCRA) ☐ TCLP - METALS (RCRA) ☐ TCLP VOC ☐ TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ TOTAL METALS (RCRA) ☐ OTHER LIST ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDES ☑ ANIONS ☐ ALKALINITY ☐ TEX / DFA Field	
03-04-5-7	32		13:05		1							
03-04-7.5-9	33		13:15		1							
03-04-10-10.5	34		13:20		1							
02-01-0-2	35		13:35		1							
02-01-2.5-4	36		13:40		1							
02-01-5-6.5	37		13:45		1							
02-01-7.5-9	38		13:46		1							
02-01-10-10.5	39		13:50		1						✓ ✓ ✓	No Hold 08 07/30/19
02-02-0-2	40		14:10		1							
02-02-2.5-4	41		14:15		1							
02-02-5-6.5	42		14:20		1							
02-02-7.5-9	43		14:21		1							
02-02-10-10.5	44		1425		1						✓ ✓ ✓	
02-03-0-2	45		14:20		1							
TOTAL					5							

RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
	7/25/19 16:30	
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
	7/30/19	
RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)

LABORATORY: DNL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.6°C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Low Sta
☐ HAND DELIVERED

Received by OCD: 4/3/2023 3:40:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

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№ 0127

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 7-25-2019 PAGE 4 OF 4

PO#: LAB WORK ORDER#: 1907389

PROJECT LOCATION OR NAME: AKA Energy / Empire Abo

LAI PROJECT #: 6-0141-11 COLLECTOR: RN/ML

Data Reported to: Mark Larson

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: Mtn/ NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☒ MTBE ☐ | TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☒ CHLORIDES | DIESEL - MOD 8015 ☒ SULFATE | OIL - MOD 8015 ☒ Mn | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDES ☐ ANIONS ☐ ALKALINITY ☐ | MES / OES Weld

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	FIELD NOTES
02-03-2.5-4	346	7/25/19	14:50	S	1				X		
02-03-5-6.5	347		14:52		1						
02-03-7.5-9	348		14:55		1						
02-03-10-12	349		14:58		1						No Add (JL) 08/30/19
08-01-0-2	350		15:23		1						
08-01-2.5-4	351		15:30		1						
08-01-5-6.5	352		15:35		1						
08-01-7.5-8	353		15:37		1						
08-01-10-11	354		15:42		1						
08-02-0-2	355		16:00		1						
08-02-2.5-4	356		16:01		1						
08-02-5-5.5	357		16:05		1						
08-02-7.5-8.5	358		12:10		1						
08-02-10-10.25	359		12:15		1						
06-04-2.5-3	360	7/25	08:03								
06-05-2-2.5	361	7/26	08:09								
TOTAL	(07/30/19)				59						

RELINQUISHED BY:(Signature) DATE/TIME 7/29/19 16:30 RECEIVED BY: (Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 7/30/19 0845 RECEIVED BY: (Signature) Jadelliner

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

LABORATORY: DHL

6

TURN AROUND TIME
NORMAL ☐
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.1°C THERM#: 18
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☒ CARRIER BILL # Lone Star
☐ HAND DELIVERED

Received by OCD: 4/3/2023 2:40:30 PM

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LSO

WWW.LSO.COM
Questions? Call 800-800-8984

Airbill No. LSO0BYG3

LSO0BYG3

1. To: Print Name (Person) | Phone (Important)

Company Name

Street Address (No P.O. Box or P.O. Box Zip Code⁸Deliveries)

Suite / Floor

City | State | Zip

2. From: Print Name (Person) | Phone (Important)

Company Name

Street Address

Suite / Floor

City | State | Zip

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- ☒ **LSO Priority Overnight*** By 10:30 a.m. to most cities
- ☐ **LSO Early Overnight*** By 8:30 a.m. select cities
- ☐ **LSO Economy Next Day*** By 3 p.m. to most cities
- ☐ **LSO 2nd Day***
- ☐ **LSO Ground**
- ☐ **LSO Saturday***
- ☐ Other _____

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

☐ Deliver Without Delivery Signature (See Limits of Liability below)

Release Signature

L_____ x W_____ x H_____

4. Package: Weight:

Your Company's Billing Reference Information

Ship Date: (mm/dd/yy) / /

5. Payment:

FOR DRIVER USE ONLY

Driver Number _____

☐ Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location _____

Date: _____

Time: _____

City Code:

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY. See LSO Service Guide for further details.

CUSTODY SEAL QEC Quality Environmental Containers 800-255-3950 • www.qeousa.com

7/29/2015

DATE

SIGNATURE

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DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates

Date Received: 7/30/2019

Work Order Number 1907389

Received by JW

Checklist completed by: _____ 7/30/2019
Signature | Date

Reviewed by DL 7/30/2019
Initials | Date

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	1.6 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

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DHL Analytical, Inc. **Date:** *30-Aug-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1907389

CASE NARRATIVE

Sample was analyzed using the methods outlined in the following references:

Method SW9056A - Anions Analysis
Method SW8260C - Volatile Organics Analysis
Method CWG/1005 - Total Petroleum Hydrocarbons Analysis
Method D2216 - Percent Moisture Analysis
Sub-contract - Organic Amines analysis by method E1671/8015. Analyzed at Ana-Lab.

LOG IN

The samples were received and log-in performed on 7/30/19. A total of 61 samples were received. For further login notes please refer to the Chain-of-Custody. The samples arrived in good condition and were properly packaged.

CWG/1005 ANALYSIS

For TPH analysis performed on 8/5/19 and 8/6/19 the surrogate recoveries for twenty-three samples were out of control limits for Isopropylbenzene and/or Octacosane at various dilutions. In addition, the surrogate recovery for the matrix spike (batch 92131) was slightly above control limits for Octacosane. These are flagged accordingly. This was due to the surrogate(s) co-eluting with the samples. No further corrective actions were taken.

For TPH analysis performed on 8/5/19 and 8/6/19 (batches 92131 & 92165) the matrix spike duplicate recoveries were slightly below control limits. These are flagged accordingly in the QC summary report. The reference samples selected for the matrix spikes and matrix spike duplicates were from this work order. The LCSs were within control limits. No further corrective actions were taken.

VOLATILE ORGANICS ANALYSIS

For Volatiles analysis (batch 92047) contained Methanol dilutions only. The matrix spike and matrix spike duplicate is associated in batch 92040.

As per the NELAP accreditation requirement the following must be noted: NMED guidance on the collection of soil for VOC analysis requires the use of Method 5035 and will reject VOC data reported for soil samples collected and prepared using another method. NELAP requires a note that if 5035 sampling method for VOCs is not utilized, the results of samples collected in bulk containers for low level volatile components may be compromised. The client has been notified and has requested the Laboratory to proceed with analysis; these results are "C" flagged in the Analytical Data Report.

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1907389

CASE NARRATIVE

For Volatiles analysis performed on 7/30/19 the surrogate recoveries for three samples were above control limits for 4-Bromofluorobenzene and/or Toluene-d8 at various dilutions. These are flagged accordingly. The remaining surrogates were within control limits. No further corrective actions were taken.

ANIONS ANALYSIS

For Anions analysis performed on 8/5/19 and 8/6/19 (batches 92139 & 921671) the matrix spikes and matrix spike duplicate recoveries were below control limits for Chloride. These are flagged accordingly in the QC summary report. The reference samples selected for the matrix spikes and matrix spike duplicates were from this work order. The LCSs were within control limits for this analyte. No further corrective actions were taken.

For Anions analysis performed on 8/5/19 (batch 92139) the samples and sample duplicates (1907389-02, 1907389-02-DUP, 1907389-05 & 1907389-05-DUP) had the RPDs above control limits for Chloride. This was due to matrix effect. These are flagged accordingly in the QC summary report. No further corrective actions were taken.

ORGANIC AMINES ANALYSIS

For Organic Amines analysis all samples were analyzed outside of HoldTime. All results are flagged with an "H" to designate this.

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1907389

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1907389-01	06-04-0-1		07/24/19 08:23 AM	7/30/2019
1907389-02	06-04-1-2		07/24/19 08:30 AM	7/30/2019
1907389-03	06-04-2-2.5		07/25/19 08:05 AM	7/30/2019
1907389-04	06-04-5-5.35		07/25/19 08:15 AM	7/30/2019
1907389-05	06-04-10-10.5		07/25/19 08:25 AM	7/30/2019
1907389-06	06-04-15-15.25		07/25/19 08:28 AM	7/30/2019
1907389-07	06-04-20-21		07/25/19 08:30 AM	7/30/2019
1907389-08	06-05-0-1		07/24/19 08:40 AM	7/30/2019
1907389-09	06-05-1-2		07/24/19 09:05 AM	7/30/2019
1907389-10	06-05-2.5-3.5		07/25/19 09:00 AM	7/30/2019
1907389-11	06-05-5-5.25		07/25/19 09:05 AM	7/30/2019
1907389-12	06-05-10-10.25		07/25/19 09:15 AM	7/30/2019
1907389-13	06-05-15-15.25		07/25/19 09:20 AM	7/30/2019
1907389-14	06-05-20-21		07/25/19 09:25 AM	7/30/2019
1907389-15	03-01-0-2		07/25/19 10:00 AM	7/30/2019
1907389-16	03-01-2.5-3		07/25/19 10:10 AM	7/30/2019
1907389-17	03-01-5-5.5		07/25/19 10:15 AM	7/30/2019
1907389-18	03-01-7.5-8		07/25/19 10:20 AM	7/30/2019
1907389-19	03-01-10-10.25		07/25/19 10:23 AM	7/30/2019
1907389-20	03-02-0-2		07/25/19 10:37 AM	7/30/2019
1907389-21	03-02-2.5-3		07/25/19 10:40 AM	7/30/2019
1907389-22	03-02-5-5.25		07/25/19 10:45 AM	7/30/2019
1907389-23	03-02-7.5-8		07/25/19 10:50 AM	7/30/2019
1907389-24	03-02-10-10.25		07/25/19 10:55 AM	7/30/2019
1907389-25	03-03-0-2		07/25/19 12:00 PM	7/30/2019
1907389-26	03-03-2.5-3.5		07/25/19 12:05 PM	7/30/2019
1907389-27	03-03-5-5.5		07/25/19 12:09 PM	7/30/2019
1907389-28	03-03-7.5-7.75		07/25/19 12:12 PM	7/30/2019
1907389-29	03-03-10-10.25		07/25/19 12:17 PM	7/30/2019
1907389-30	03-04-0-2		07/25/19 12:55 PM	7/30/2019
1907389-31	03-04-2.5-4		07/25/19 01:00 PM	7/30/2019
1907389-32	03-04-5-7		07/25/19 01:05 PM	7/30/2019
1907389-33	03-04-7.5-9		07/25/19 01:15 PM	7/30/2019
1907389-34	03-04-10-10.5		07/25/19 01:20 PM	7/30/2019
1907389-35	02-01-0-2		07/25/19 01:35 PM	7/30/2019
1907389-36	02-01-2.5-4		07/25/19 01:40 PM	7/30/2019
1907389-37	02-01-5-6.5		07/25/19 01:45 PM	7/30/2019
1907389-38	02-01-7.5-9		07/25/19 01:46 PM	7/30/2019

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1907389

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1907389-39	02-01-10-10.5		07/25/19 01:50 PM	7/30/2019
1907389-40	02-02-0-2		07/25/19 02:10 PM	7/30/2019
1907389-41	02-02-2.5-4		07/25/19 02:15 PM	7/30/2019
1907389-42	02-02-5-6.5		07/25/19 02:20 PM	7/30/2019
1907389-43	02-02-7.5-8		07/25/19 02:21 PM	7/30/2019
1907389-44	02-02-10-11.25		07/25/19 02:25 PM	7/30/2019
1907389-45	02-03-0-2		07/25/19 02:40 PM	7/30/2019
1907389-46	02-03-2.5-4		07/25/19 02:50 PM	7/30/2019
1907389-47	02-03-5-6.5		07/25/19 02:52 PM	7/30/2019
1907389-48	02-03-7.5-9		07/25/19 02:55 PM	7/30/2019
1907389-49	02-03-10-12		07/25/19 02:58 PM	7/30/2019
1907389-50	08-01-0-2		07/25/19 03:23 PM	7/30/2019
1907389-51	08-01-2.5-4		07/25/19 03:30 PM	7/30/2019
1907389-52	08-01-5-6.5		07/25/19 03:35 PM	7/30/2019
1907389-53	08-01-7.5-8		07/25/19 03:37 PM	7/30/2019
1907389-54	08-01-10-11		07/25/19 03:42 PM	7/30/2019
1907389-55	08-02-0-2		07/25/19 04:00 PM	7/30/2019
1907389-56	08-02-2.5-4		07/25/19 04:01 PM	7/30/2019
1907389-57	08-02-5-5.5		07/25/19 04:05 PM	7/30/2019
1907389-58	08-02-7.5-8.5		07/25/19 04:10 PM	7/30/2019
1907389-59	08-02-10-10.25		07/25/19 04:15 PM	7/30/2019
1907389-60	06-04-2.5-3		07/25/19 08:03 AM	7/30/2019
1907389-61	06-05-2-2.5		07/24/19 09:09 AM	7/30/2019

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Lab Order: 1907389
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907389-01A	06-04-0-1	07/24/19 08:23 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-04-0-1	07/24/19 08:23 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-04-0-1	07/24/19 08:23 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	06-04-0-1	07/24/19 08:23 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-02A	06-04-1-2	07/24/19 08:30 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-04-1-2	07/24/19 08:30 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-04-1-2	07/24/19 08:30 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-03A	06-04-2-2.5	07/25/19 08:05 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-04-2-2.5	07/25/19 08:05 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-04-2-2.5	07/25/19 08:05 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-04A	06-04-5-5.35	07/25/19 08:15 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-04-5-5.35	07/25/19 08:15 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-04-5-5.35	07/25/19 08:15 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-05A	06-04-10-10.5	07/25/19 08:25 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-04-10-10.5	07/25/19 08:25 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-04-10-10.5	07/25/19 08:25 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-06A	06-04-15-15.25	07/25/19 08:28 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-04-15-15.25	07/25/19 08:28 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-04-15-15.25	07/25/19 08:28 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-07A	06-04-20-21	07/25/19 08:30 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-04-20-21	07/25/19 08:30 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-04-20-21	07/25/19 08:30 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-08A	06-05-0-1	07/24/19 08:40 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-05-0-1	07/24/19 08:40 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-05-0-1	07/24/19 08:40 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	06-05-0-1	07/24/19 08:40 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-09A	06-05-1-2	07/24/19 09:05 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-05-1-2	07/24/19 09:05 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135

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Lab Order: 1907389
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907389-09A	06-05-1-2	07/24/19 09:05 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-10A	06-05-2.5-3.5	07/25/19 09:00 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-05-2.5-3.5	07/25/19 09:00 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-05-2.5-3.5	07/25/19 09:00 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-11A	06-05-5-5.25	07/25/19 09:05 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-05-5-5.25	07/25/19 09:05 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-05-5-5.25	07/25/19 09:05 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-12A	06-05-10-10.25	07/25/19 09:15 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-05-10-10.25	07/25/19 09:15 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-05-10-10.25	07/25/19 09:15 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-13A	06-05-15-15.25	07/25/19 09:20 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-05-15-15.25	07/25/19 09:20 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-05-15-15.25	07/25/19 09:20 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-14A	06-05-20-21	07/25/19 09:25 AM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	06-05-20-21	07/25/19 09:25 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	06-05-20-21	07/25/19 09:25 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-15A	03-01-0-2	07/25/19 10:00 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	03-01-0-2	07/25/19 10:00 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	03-01-0-2	07/25/19 10:00 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 03:06 PM	92047
	03-01-0-2	07/25/19 10:00 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
	03-01-0-2	07/25/19 10:00 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-16A	03-01-2.5-3	07/25/19 10:10 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	03-01-2.5-3	07/25/19 10:10 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-17A	03-01-5-5.5	07/25/19 10:15 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	03-01-5-5.5	07/25/19 10:15 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
	03-01-5-5.5	07/25/19 10:15 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-18A	03-01-7.5-8	07/25/19 10:20 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	03-01-7.5-8	07/25/19 10:20 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131

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Lab Order: 1907389
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907389-18A	03-01-7.5-8	07/25/19 10:20 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-19A	03-01-10-10.25	07/25/19 10:23 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	03-01-10-10.25	07/25/19 10:23 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
	03-01-10-10.25	07/25/19 10:23 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-20A	03-02-0-2	07/25/19 10:37 AM	Soil	D2216	Moisture Preparation	08/02/19 02:43 PM	92135
	03-02-0-2	07/25/19 10:37 AM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	03-02-0-2	07/25/19 10:37 AM	Soil	TX1005	TX1005 Soil Prep	08/02/19 01:03 PM	92131
1907389-21A	03-02-2.5-3	07/25/19 10:40 AM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-02-2.5-3	07/25/19 10:40 AM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-22A	03-02-5-5.25	07/25/19 10:45 AM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-02-5-5.25	07/25/19 10:45 AM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-23A	03-02-7.5-8	07/25/19 10:50 AM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-02-7.5-8	07/25/19 10:50 AM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-24A	03-02-10-10.25	07/25/19 10:55 AM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-02-10-10.25	07/25/19 10:55 AM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-25A	03-03-0-2	07/25/19 12:00 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-03-0-2	07/25/19 12:00 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-26A	03-03-2.5-3.5	07/25/19 12:05 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-03-2.5-3.5	07/25/19 12:05 PM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	03-03-2.5-3.5	07/25/19 12:05 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
	03-03-2.5-3.5	07/25/19 12:05 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-27A	03-03-5-5.5	07/25/19 12:09 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-03-5-5.5	07/25/19 12:09 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
	03-03-5-5.5	07/25/19 12:09 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-28A	03-03-7.5-7.75	07/25/19 12:12 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-03-7.5-7.75	07/25/19 12:12 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
	03-03-7.5-7.75	07/25/19 12:12 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-29A	03-03-10-10.25	07/25/19 12:17 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137

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Lab Order: 1907389
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907389-29A	03-03-10-10.25	07/25/19 12:17 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
	03-03-10-10.25	07/25/19 12:17 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-30A	03-04-0-2	07/25/19 12:55 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-04-0-2	07/25/19 12:55 PM	Soil	SW5030C	Purge and Trap Soils GC/MS	07/30/19 10:49 AM	92040
	03-04-0-2	07/25/19 12:55 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
	03-04-0-2	07/25/19 12:55 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-31A	03-04-2.5-4	07/25/19 01:00 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-04-2.5-4	07/25/19 01:00 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-32A	03-04-5-7	07/25/19 01:05 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-04-5-7	07/25/19 01:05 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
	03-04-5-7	07/25/19 01:05 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-33A	03-04-7.5-9	07/25/19 01:15 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-04-7.5-9	07/25/19 01:15 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
	03-04-7.5-9	07/25/19 01:15 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-34A	03-04-10-10.5	07/25/19 01:20 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	03-04-10-10.5	07/25/19 01:20 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-35A	02-01-0-2	07/25/19 01:35 PM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	02-01-0-2	07/25/19 01:35 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	02-01-0-2	07/25/19 01:35 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-36A	02-01-2.5-4	07/25/19 01:40 PM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	02-01-2.5-4	07/25/19 01:40 PM	Soil	D2216	Moisture Preparation	08/02/19 02:46 PM	92137
	02-01-2.5-4	07/25/19 01:40 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-37A	02-01-5-6.5	07/25/19 01:45 PM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	02-01-5-6.5	07/25/19 01:45 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-01-5-6.5	07/25/19 01:45 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-38A	02-01-7.5-9	07/25/19 01:46 PM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	02-01-7.5-9	07/25/19 01:46 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-01-7.5-9	07/25/19 01:46 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164

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Lab Order: 1907389
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PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907389-39A	02-01-10-10.5	07/25/19 01:50 PM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	02-01-10-10.5	07/25/19 01:50 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-01-10-10.5	07/25/19 01:50 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-40A	02-02-0-2	07/25/19 02:10 PM	Soil	SW9056A	Anion Prep	08/05/19 08:28 AM	92139
	02-02-0-2	07/25/19 02:10 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-02-0-2	07/25/19 02:10 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:14 PM	92164
1907389-41A	02-02-2.5-4	07/25/19 02:15 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-02-2.5-4	07/25/19 02:15 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-02-2.5-4	07/25/19 02:15 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-42A	02-02-5-6.5	07/25/19 02:20 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-02-5-6.5	07/25/19 02:20 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-02-5-6.5	07/25/19 02:20 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-43A	02-02-7.5-8	07/25/19 02:21 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-02-7.5-8	07/25/19 02:21 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-02-7.5-8	07/25/19 02:21 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-44A	02-02-10-11.25	07/25/19 02:25 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-02-10-11.25	07/25/19 02:25 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-02-10-11.25	07/25/19 02:25 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-45A	02-03-0-2	07/25/19 02:40 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-03-0-2	07/25/19 02:40 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-03-0-2	07/25/19 02:40 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
	02-03-0-2	07/25/19 02:40 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-46A	02-03-2.5-4	07/25/19 02:50 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-03-2.5-4	07/25/19 02:50 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-03-2.5-4	07/25/19 02:50 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-47A	02-03-5-6.5	07/25/19 02:52 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-03-5-6.5	07/25/19 02:52 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-03-5-6.5	07/25/19 02:52 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165

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PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907389-48A	02-03-7.5-9	07/25/19 02:55 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-03-7.5-9	07/25/19 02:55 PM	Soil	D2216	Moisture Preparation	08/06/19 05:20 PM	92200
	02-03-7.5-9	07/25/19 02:55 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-49A	02-03-10-12	07/25/19 02:58 PM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	02-03-10-12	07/25/19 02:58 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	02-03-10-12	07/25/19 02:58 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-50A	08-01-0-2	07/25/19 03:23 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	08-01-0-2	07/25/19 03:23 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-51A	08-01-2.5-4	07/25/19 03:30 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	08-01-2.5-4	07/25/19 03:30 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-52A	08-01-5-6.5	07/25/19 03:35 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	08-01-5-6.5	07/25/19 03:35 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-53A	08-01-7.5-8	07/25/19 03:37 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	08-01-7.5-8	07/25/19 03:37 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-54A	08-01-10-11	07/25/19 03:42 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	08-01-10-11	07/25/19 03:42 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-55A	08-02-0-2	07/25/19 04:00 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	08-02-0-2	07/25/19 04:00 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-56A	08-02-2.5-4	07/25/19 04:01 PM	Soil	D2216	Moisture Preparation	08/05/19 03:42 PM	92169
	08-02-2.5-4	07/25/19 04:01 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-57A	08-02-5-5.5	07/25/19 04:05 PM	Soil	D2216	Moisture Preparation	08/05/19 03:43 PM	92170
	08-02-5-5.5	07/25/19 04:05 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-58A	08-02-7.5-8.5	07/25/19 04:10 PM	Soil	D2216	Moisture Preparation	08/05/19 03:43 PM	92170
	08-02-7.5-8.5	07/25/19 04:10 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-59A	08-02-10-10.25	07/25/19 04:15 PM	Soil	D2216	Moisture Preparation	08/05/19 03:43 PM	92170
	08-02-10-10.25	07/25/19 04:15 PM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-60A	06-04-2.5-3	07/25/19 08:03 AM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	06-04-2.5-3	07/25/19 08:03 AM	Soil	D2216	Moisture Preparation	08/05/19 03:43 PM	92170

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DHL Analytical, Inc.

30-Aug-19

Lab Order: 1907389
Client: Larson & Associates
Project: AKA Energy/Empire ABO

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1907389-60A	06-04-2.5-3	07/25/19 08:03 AM	Soil	TX1005	TX1005 Soil Prep	08/05/19 02:16 PM	92165
1907389-61A	06-05-2-2.5	07/24/19 09:09 AM	Soil	SW9056A	Anion Prep	08/06/19 09:09 AM	92171
	06-05-2-2.5	07/24/19 09:09 AM	Soil	D2216	Moisture Preparation	08/05/19 03:43 PM	92170
	06-05-2-2.5	07/24/19 09:09 AM	Soil	TX1005	TX1005 Soil Prep	08/06/19 01:19 PM	92190

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907389-01A	06-04-0-1	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 07:42 PM	GCMS2_190730A
	06-04-0-1	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 12:39 PM	IC4_190805B
	06-04-0-1	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-04-0-1	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 12:04 PM	GC12_190805A
1907389-02A	06-04-1-2	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 12:55 PM	IC4_190805B
	06-04-1-2	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-04-1-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 12:32 PM	GC12_190805A
1907389-03A	06-04-2-2.5	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 01:11 PM	IC4_190805B
	06-04-2-2.5	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-04-2-2.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 08:49 AM	GC12_190805A
1907389-04A	06-04-5-5.35	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 01:27 PM	IC4_190805B
	06-04-5-5.35	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-04-5-5.35	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 08:58 AM	GC12_190805A
1907389-05A	06-04-10-10.5	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 01:43 PM	IC4_190805B
	06-04-10-10.5	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-04-10-10.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 12:41 PM	GC12_190805A
1907389-06A	06-04-15-15.25	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 01:59 PM	IC4_190805B
	06-04-15-15.25	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-04-15-15.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 09:07 AM	GC12_190805A
1907389-07A	06-04-20-21	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 02:15 PM	IC4_190805B
	06-04-20-21	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-04-20-21	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 09:16 AM	GC12_190805A
1907389-08A	06-05-0-1	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 08:10 PM	GCMS2_190730A
	06-05-0-1	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 02:31 PM	IC4_190805B
	06-05-0-1	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-05-0-1	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 09:24 AM	GC12_190805A
1907389-09A	06-05-1-2	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 02:47 PM	IC4_190805B
	06-05-1-2	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907389-09A	06-05-1-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 09:33 AM	GC12_190805A
1907389-10A	06-05-2.5-3.5	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 03:03 PM	IC4_190805B
	06-05-2.5-3.5	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-05-2.5-3.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 09:42 AM	GC12_190805A
1907389-11A	06-05-5-5.25	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 05:19 PM	IC4_190805B
	06-05-5-5.25	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-05-5-5.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 09:51 AM	GC12_190805A
1907389-12A	06-05-10-10.25	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 05:35 PM	IC4_190805B
	06-05-10-10.25	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-05-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 10:00 AM	GC12_190805A
1907389-13A	06-05-15-15.25	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 05:51 PM	IC4_190805B
	06-05-15-15.25	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-05-15-15.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 10:09 AM	GC12_190805A
1907389-14A	06-05-20-21	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 06:07 PM	IC4_190805B
	06-05-20-21	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	06-05-20-21	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 10:18 AM	GC12_190805A
1907389-15A	03-01-0-2	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92047	100	07/30/19 07:43 PM	GCMS1_190730B
	03-01-0-2	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 04:25 PM	GCMS2_190730A
	03-01-0-2	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	03-01-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	10	08/05/19 12:50 PM	GC12_190805A
	03-01-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	2	08/05/19 01:09 PM	GC12_190805A
1907389-15B	03-01-0-2	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/09/19	SUB_190812B
	03-01-0-2	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/28/19	SUB_190829A
1907389-16A	03-01-2.5-3	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	03-01-2.5-3	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 10:27 AM	GC12_190805A
1907389-16B	03-01-2.5-3	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
	03-01-2.5-3	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/09/19	SUB_190812B
1907389-17A	03-01-5-5.5	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A

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Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907389-17A	03-01-5-5.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 10:36 AM	GC12_190805A
	03-01-5-5.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 11:37 AM	GC12_190805A
1907389-17B	03-01-5-5.5	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/09/19	SUB_190812B
	03-01-5-5.5	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-18A	03-01-7.5-8	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	03-01-7.5-8	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 10:45 AM	GC12_190805A
	03-01-7.5-8	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 11:46 AM	GC12_190805A
1907389-18B	03-01-7.5-8	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/09/19	SUB_190812B
	03-01-7.5-8	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-19A	03-01-10-10.25	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	03-01-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 10:54 AM	GC12_190805A
	03-01-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 11:55 AM	GC12_190805A
1907389-19B	03-01-10-10.25	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/09/19	SUB_190812B
	03-01-10-10.25	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-20A	03-02-0-2	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 04:53 PM	GCMS2_190730A
	03-02-0-2	Soil	D2216	Percent Moisture	92135	1	08/05/19 10:00 AM	PMOIST_190802A
	03-02-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92131	1	08/05/19 11:03 AM	GC12_190805A
1907389-20B	03-02-0-2	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/09/19	SUB_190812B
	03-02-0-2	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-21A	03-02-2.5-3	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-02-2.5-3	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	5	08/06/19 03:13 PM	GC12_190806A
1907389-21B	03-02-2.5-3	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
	03-02-2.5-3	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
1907389-22A	03-02-5-5.25	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-02-5-5.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 10:10 AM	GC12_190806A
1907389-22B	03-02-5-5.25	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-02-5-5.25	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-23A	03-02-7.5-8	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907389-23A	03-02-7.5-8	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 02:29 PM	GC12_190806A
1907389-23B	03-02-7.5-8	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-02-7.5-8	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-24A	03-02-10-10.25	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-02-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 10:28 AM	GC12_190806A
1907389-24B	03-02-10-10.25	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-02-10-10.25	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-25A	03-03-0-2	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-03-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 10:37 AM	GC12_190806A
1907389-25B	03-03-0-2	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
	03-03-0-2	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
1907389-26A	03-03-2.5-3.5	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 03:55 PM	GCMS2_190730A
	03-03-2.5-3.5	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-03-2.5-3.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 10:46 AM	GC12_190806A
	03-03-2.5-3.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	5	08/06/19 02:47 PM	GC12_190806A
1907389-26B	03-03-2.5-3.5	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-03-2.5-3.5	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-27A	03-03-5-5.5	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-03-5-5.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 10:55 AM	GC12_190806A
	03-03-5-5.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 01:54 PM	GC12_190806A
1907389-27B	03-03-5-5.5	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-03-5-5.5	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-28A	03-03-7.5-7.75	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-03-7.5-7.75	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 11:04 AM	GC12_190806A
	03-03-7.5-7.75	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 02:03 PM	GC12_190806A
1907389-28B	03-03-7.5-7.75	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-03-7.5-7.75	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-29A	03-03-10-10.25	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C

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1907389-29A	03-03-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 11:13 AM	GC12_190806A
	03-03-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 02:12 PM	GC12_190806A
1907389-29B	03-03-10-10.25	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-03-10-10.25	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-30A	03-04-0-2	Soil	SW8260C	8260 Soil Volatiles by GC/MS	92040	1	07/30/19 08:38 PM	GCMS2_190730A
	03-04-0-2	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-04-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 11:44 AM	GC12_190806A
	03-04-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 02:20 PM	GC12_190806A
1907389-30B	03-04-0-2	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
	03-04-0-2	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
1907389-31A	03-04-2.5-4	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-04-2.5-4	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 12:02 PM	GC12_190806A
1907389-31B	03-04-2.5-4	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-04-2.5-4	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-32A	03-04-5-7	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-04-5-7	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	5	08/06/19 03:21 PM	GC12_190806A
	03-04-5-7	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	5	08/06/19 03:41 PM	GC12_190806A
1907389-32B	03-04-5-7	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-04-5-7	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-33A	03-04-7.5-9	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-04-7.5-9	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	2	08/06/19 02:38 PM	GC12_190806A
	03-04-7.5-9	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 12:11 PM	GC12_190806A
1907389-33B	03-04-7.5-9	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-04-7.5-9	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A
1907389-34A	03-04-10-10.5	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	03-04-10-10.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 12:20 PM	GC12_190806A
1907389-34B	03-04-10-10.5	Soil	E1671/8015	Organic Amines in Solid	R106148	1	08/12/19	SUB_190812B
	03-04-10-10.5	Soil	E1671/8015	Organic Amines in Solid	R106154	1	08/29/19	SUB_190829A

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1907389-35A	02-01-0-2	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 06:23 PM	IC4_190805B
	02-01-0-2	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	02-01-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 12:29 PM	GC12_190806A
1907389-36A	02-01-2.5-4	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 06:39 PM	IC4_190805B
	02-01-2.5-4	Soil	D2216	Percent Moisture	92137	1	08/05/19 08:45 AM	PMOIST_190802C
	02-01-2.5-4	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 12:38 PM	GC12_190806A
1907389-37A	02-01-5-6.5	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 06:55 PM	IC4_190805B
	02-01-5-6.5	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-01-5-6.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 12:47 PM	GC12_190806A
1907389-38A	02-01-7.5-9	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 07:11 PM	IC4_190805B
	02-01-7.5-9	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-01-7.5-9	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 12:56 PM	GC12_190806A
1907389-39A	02-01-10-10.5	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 07:27 PM	IC4_190805B
	02-01-10-10.5	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-01-10-10.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 01:05 PM	GC12_190806A
1907389-40A	02-02-0-2	Soil	SW9056A	Anions by IC method - Soil	92139	10	08/05/19 07:43 PM	IC4_190805B
	02-02-0-2	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-02-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92164	1	08/06/19 01:13 PM	GC12_190806A
1907389-41A	02-02-2.5-4	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 06:33 PM	IC2_190806A
	02-02-2.5-4	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-02-2.5-4	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 04:40 PM	GC12_190806B
1907389-42A	02-02-5-6.5	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 06:49 PM	IC2_190806A
	02-02-5-6.5	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-02-5-6.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 04:49 PM	GC12_190806B
1907389-43A	02-02-7.5-8	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 07:05 PM	IC2_190806A
	02-02-7.5-8	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-02-7.5-8	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 04:58 PM	GC12_190806B
1907389-44A	02-02-10-11.25	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 07:21 PM	IC2_190806A

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1907389-44A	02-02-10-11.25	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-02-10-11.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 05:07 PM	GC12_190806B
1907389-45A	02-03-0-2	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 07:37 PM	IC2_190806A
	02-03-0-2	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-03-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 07:30 PM	GC12_190806B
	02-03-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 07:39 PM	GC12_190806B
1907389-46A	02-03-2.5-4	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 07:53 PM	IC2_190806A
	02-03-2.5-4	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-03-2.5-4	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 05:16 PM	GC12_190806B
1907389-47A	02-03-5-6.5	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 08:09 PM	IC2_190806A
	02-03-5-6.5	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-03-5-6.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 05:25 PM	GC12_190806B
1907389-48A	02-03-7.5-9	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 08:25 PM	IC2_190806A
	02-03-7.5-9	Soil	D2216	Percent Moisture	92200	1	08/07/19 08:40 AM	PMOIST_190806A
	02-03-7.5-9	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 05:34 PM	GC12_190806B
1907389-49A	02-03-10-12	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 08:41 PM	IC2_190806A
	02-03-10-12	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	02-03-10-12	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 05:43 PM	GC12_190806B
1907389-50A	08-01-0-2	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	08-01-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 05:52 PM	GC12_190806B
1907389-51A	08-01-2.5-4	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	08-01-2.5-4	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 06:01 PM	GC12_190806B
1907389-52A	08-01-5-6.5	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	08-01-5-6.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 07:48 PM	GC12_190806B
1907389-53A	08-01-7.5-8	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	08-01-7.5-8	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 06:09 PM	GC12_190806B
1907389-54A	08-01-10-11	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	08-01-10-11	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 06:18 PM	GC12_190806B

Released to Imaging: 4/3/2023 3:36:09 PM
Received by OCD: 4/3/2023 2:46:30 PM

Lab Order: 1907389
Client: Larson & Associates
Project: AKA Energy/Empire ABO

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1907389-55A	08-02-0-2	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	08-02-0-2	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 06:27 PM	GC12_190806B
1907389-56A	08-02-2.5-4	Soil	D2216	Percent Moisture	92169	1	08/06/19 08:35 AM	PMOIST_190805B
	08-02-2.5-4	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 07:57 PM	GC12_190806B
1907389-57A	08-02-5-5.5	Soil	D2216	Percent Moisture	92170	1	08/06/19 08:35 AM	PMOIST_190805C
	08-02-5-5.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 06:36 PM	GC12_190806B
1907389-58A	08-02-7.5-8.5	Soil	D2216	Percent Moisture	92170	1	08/06/19 08:35 AM	PMOIST_190805C
	08-02-7.5-8.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 06:45 PM	GC12_190806B
1907389-59A	08-02-10-10.25	Soil	D2216	Percent Moisture	92170	1	08/06/19 08:35 AM	PMOIST_190805C
	08-02-10-10.25	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 06:54 PM	GC12_190806B
1907389-60A	06-04-2.5-3	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 08:57 PM	IC2_190806A
	06-04-2.5-3	Soil	D2216	Percent Moisture	92170	1	08/06/19 08:35 AM	PMOIST_190805C
	06-04-2.5-3	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92165	1	08/06/19 07:03 PM	GC12_190806B
1907389-61A	06-05-2-2.5	Soil	SW9056A	Anions by IC method - Soil	92171	10	08/06/19 10:33 PM	IC2_190806A
	06-05-2-2.5	Soil	D2216	Percent Moisture	92170	1	08/06/19 08:35 AM	PMOIST_190805C
	06-05-2-2.5	Soil	CWG/1005	TPH in Soil/Solid by CWG Method	92190	1	08/07/19 09:18 AM	GC12_190807A

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-04-0-1
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-01
Project No:	6-0141-11	**Collection Date:**	07/24/19 08:23 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.70	9.70	27.7		mg/Kg-dry	1	08/05/19 12:04 PM
TPH-DRO >C10-C28	65.4	9.70	27.7		mg/Kg-dry	1	08/05/19 12:04 PM
TPH-ORO >C28-C35	101	9.70	27.7		mg/Kg-dry	1	08/05/19 12:04 PM
T/R Hydrocarbons: C6-C35	166	9.70	27.7		mg/Kg-dry	1	08/05/19 12:04 PM
Surr: Isopropylbenzene	74.4	0	70-130		%REC	1	08/05/19 12:04 PM
Surr: Octacosane	271	0	70-130	S	%REC	1	08/05/19 12:04 PM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	<0.00147	0.00147	0.00733	C	mg/Kg-dry	1	07/30/19 07:42 PM
Ethylbenzene	0.00610	0.00147	0.00733	JC	mg/Kg-dry	1	07/30/19 07:42 PM
Toluene	0.00185	0.00147	0.00733	JC	mg/Kg-dry	1	07/30/19 07:42 PM
Total Xylenes	0.00254	0.00147	0.00733	JC	mg/Kg-dry	1	07/30/19 07:42 PM
Surr: 1,2-Dichloroethane-d4	91.1	0	52-149		%REC	1	07/30/19 07:42 PM
Surr: 4-Bromofluorobenzene	95.7	0	84-118		%REC	1	07/30/19 07:42 PM
Surr: Dibromofluoromethane	101	0	65-135		%REC	1	07/30/19 07:42 PM
Surr: Toluene-d8	91.9	0	84-116		%REC	1	07/30/19 07:42 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	78.1	27.1	67.8		mg/Kg-dry	10	08/05/19 12:39 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	31.9	0	0		WT%	1	08/05/19 10:00 AM

Qualifiers:

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-04-1-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-02
Project No:	6-0141-11	**Collection Date:**	07/24/19 08:30 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.05	9.05	25.9		mg/Kg-dry	1	08/05/19 12:32 PM
TPH-DRO >C10-C28	108	9.05	25.9		mg/Kg-dry	1	08/05/19 12:32 PM
TPH-ORO >C28-C35	110	9.05	25.9		mg/Kg-dry	1	08/05/19 12:32 PM
T/R Hydrocarbons: C6-C35	218	9.05	25.9		mg/Kg-dry	1	08/05/19 12:32 PM
Surr: Isopropylbenzene	80.0	0	70-130		%REC	1	08/05/19 12:32 PM
Surr: Octacosane	143	0	70-130	S	%REC	1	08/05/19 12:32 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	145	26.1	65.4		mg/Kg-dry	10	08/05/19 12:55 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	25.3	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-04-2-2.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-03
Project No:	6-0141-11	**Collection Date:**	07/25/19 08:05 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.84	8.84	25.2		mg/Kg-dry	1	08/05/19 08:49 AM
TPH-DRO >C10-C28	<8.84	8.84	25.2		mg/Kg-dry	1	08/05/19 08:49 AM
TPH-ORO >C28-C35	<8.84	8.84	25.2		mg/Kg-dry	1	08/05/19 08:49 AM
T/R Hydrocarbons: C6-C35	<8.84	8.84	25.2		mg/Kg-dry	1	08/05/19 08:49 AM
Surr: Isopropylbenzene	65.6	0	70-130	S	%REC	1	08/05/19 08:49 AM
Surr: Octacosane	100	0	70-130		%REC	1	08/05/19 08:49 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	32.4	27.6	69.1	J	mg/Kg-dry	10	08/05/19 01:11 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	31.7	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-04-5-5.35
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-04
Project No:	6-0141-11	**Collection Date:**	07/25/19 08:15 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.53	9.53	27.2		mg/Kg-dry	1	08/05/19 08:58 AM
TPH-DRO >C10-C28	<9.53	9.53	27.2		mg/Kg-dry	1	08/05/19 08:58 AM
TPH-ORO >C28-C35	<9.53	9.53	27.2		mg/Kg-dry	1	08/05/19 08:58 AM
T/R Hydrocarbons: C6-C35	<9.53	9.53	27.2		mg/Kg-dry	1	08/05/19 08:58 AM
Surr: Isopropylbenzene	94.0	0	70-130		%REC	1	08/05/19 08:58 AM
Surr: Octacosane	97.3	0	70-130		%REC	1	08/05/19 08:58 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<25.5	25.5	63.8		mg/Kg-dry	10	08/05/19 01:27 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	26.6	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-04-10-10.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-05
Project No:	6-0141-11	**Collection Date:**	07/25/19 08:25 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.08	9.08	26.0		mg/Kg-dry	1	08/05/19 12:41 PM
TPH-DRO >C10-C28	188	9.08	26.0		mg/Kg-dry	1	08/05/19 12:41 PM
TPH-ORO >C28-C35	246	9.08	26.0		mg/Kg-dry	1	08/05/19 12:41 PM
T/R Hydrocarbons: C6-C35	434	9.08	26.0		mg/Kg-dry	1	08/05/19 12:41 PM
Surr: Isopropylbenzene	93.6	0	70-130		%REC	1	08/05/19 12:41 PM
Surr: Octacosane	297	0	70-130	S	%REC	1	08/05/19 12:41 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	48.3	25.3	63.3	J	mg/Kg-dry	10	08/05/19 01:43 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	26.8	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-04-15-15.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-06
Project No:	6-0141-11	**Collection Date:**	07/25/19 08:28 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.34	8.34	23.8		mg/Kg-dry	1	08/05/19 09:07 AM
TPH-DRO >C10-C28	<8.34	8.34	23.8		mg/Kg-dry	1	08/05/19 09:07 AM
TPH-ORO >C28-C35	<8.34	8.34	23.8		mg/Kg-dry	1	08/05/19 09:07 AM
T/R Hydrocarbons: C6-C35	<8.34	8.34	23.8		mg/Kg-dry	1	08/05/19 09:07 AM
Surr: Isopropylbenzene	74.4	0	70-130		%REC	1	08/05/19 09:07 AM
Surr: Octacosane	96.6	0	70-130		%REC	1	08/05/19 09:07 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	69.2	26.4	65.9		mg/Kg-dry	10	08/05/19 01:59 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	27.1	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-04-20-21
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-07
Project No:	6-0141-11	**Collection Date:**	07/25/19 08:30 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.87	7.87	22.5		mg/Kg-dry	1	08/05/19 09:16 AM
TPH-DRO >C10-C28	<7.87	7.87	22.5		mg/Kg-dry	1	08/05/19 09:16 AM
TPH-ORO >C28-C35	<7.87	7.87	22.5		mg/Kg-dry	1	08/05/19 09:16 AM
T/R Hydrocarbons: C6-C35	<7.87	7.87	22.5		mg/Kg-dry	1	08/05/19 09:16 AM
Surr: Isopropylbenzene	80.5	0	70-130		%REC	1	08/05/19 09:16 AM
Surr: Octacosane	98.1	0	70-130		%REC	1	08/05/19 09:16 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	35.7	22.5	56.4	J	mg/Kg-dry	10	08/05/19 02:15 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	15.2	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-05-0-1
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-08
Project No:	6-0141-11	**Collection Date:**	07/24/19 08:40 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.16	8.16	23.3		mg/Kg-dry	1	08/05/19 09:24 AM
TPH-DRO >C10-C28	<8.16	8.16	23.3		mg/Kg-dry	1	08/05/19 09:24 AM
TPH-ORO >C28-C35	<8.16	8.16	23.3		mg/Kg-dry	1	08/05/19 09:24 AM
T/R Hydrocarbons: C6-C35	<8.16	8.16	23.3		mg/Kg-dry	1	08/05/19 09:24 AM
Surr: Isopropylbenzene	61.5	0	70-130	S	%REC	1	08/05/19 09:24 AM
Surr: Octacosane	92.3	0	70-130		%REC	1	08/05/19 09:24 AM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	<0.00127	0.00127	0.00636	C	mg/Kg-dry	1	07/30/19 08:10 PM
Ethylbenzene	<0.00127	0.00127	0.00636	C	mg/Kg-dry	1	07/30/19 08:10 PM
Toluene	<0.00127	0.00127	0.00636	C	mg/Kg-dry	1	07/30/19 08:10 PM
Total Xylenes	<0.00127	0.00127	0.00636	C	mg/Kg-dry	1	07/30/19 08:10 PM
Surr: 1,2-Dichloroethane-d4	84.6	0	52-149		%REC	1	07/30/19 08:10 PM
Surr: 4-Bromofluorobenzene	95.2	0	84-118		%REC	1	07/30/19 08:10 PM
Surr: Dibromofluoromethane	98.7	0	65-135		%REC	1	07/30/19 08:10 PM
Surr: Toluene-d8	89.6	0	84-116		%REC	1	07/30/19 08:10 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	32.9	26.2	65.6	J	mg/Kg-dry	10	08/05/19 02:31 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	28.9	0	0		WT%	1	08/05/19 10:00 AM

Qualifiers:

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-05-1-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-09
Project No:	6-0141-11	**Collection Date:**	07/24/19 09:05 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.62	9.62	27.5		mg/Kg-dry	1	08/05/19 09:33 AM
TPH-DRO >C10-C28	<9.62	9.62	27.5		mg/Kg-dry	1	08/05/19 09:33 AM
TPH-ORO >C28-C35	<9.62	9.62	27.5		mg/Kg-dry	1	08/05/19 09:33 AM
T/R Hydrocarbons: C6-C35	<9.62	9.62	27.5		mg/Kg-dry	1	08/05/19 09:33 AM
Surr: Isopropylbenzene	66.0	0	70-130	S	%REC	1	08/05/19 09:33 AM
Surr: Octacosane	98.6	0	70-130		%REC	1	08/05/19 09:33 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	34.9	27.7	69.2	J	mg/Kg-dry	10	08/05/19 02:47 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	28.8	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-05-2.5-3.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-10
Project No:	6-0141-11	**Collection Date:**	07/25/19 09:00 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.33	9.33	26.7		mg/Kg-dry	1	08/05/19 09:42 AM
TPH-DRO >C10-C28	<9.33	9.33	26.7		mg/Kg-dry	1	08/05/19 09:42 AM
TPH-ORO >C28-C35	<9.33	9.33	26.7		mg/Kg-dry	1	08/05/19 09:42 AM
T/R Hydrocarbons: C6-C35	<9.33	9.33	26.7		mg/Kg-dry	1	08/05/19 09:42 AM
Surr: Isopropylbenzene	78.7	0	70-130		%REC	1	08/05/19 09:42 AM
Surr: Octacosane	98.0	0	70-130		%REC	1	08/05/19 09:42 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	28.0	26.9	67.3	J	mg/Kg-dry	10	08/05/19 03:03 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	27.3	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-05-5-5.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-11
Project No:	6-0141-11	**Collection Date:**	07/25/19 09:05 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.85	8.85	25.3		mg/Kg-dry	1	08/05/19 09:51 AM
TPH-DRO >C10-C28	<8.85	8.85	25.3		mg/Kg-dry	1	08/05/19 09:51 AM
TPH-ORO >C28-C35	<8.85	8.85	25.3		mg/Kg-dry	1	08/05/19 09:51 AM
T/R Hydrocarbons: C6-C35	<8.85	8.85	25.3		mg/Kg-dry	1	08/05/19 09:51 AM
Surr: Isopropylbenzene	86.1	0	70-130		%REC	1	08/05/19 09:51 AM
Surr: Octacosane	99.5	0	70-130		%REC	1	08/05/19 09:51 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	28.8	28.3	70.8	J	mg/Kg-dry	10	08/05/19 05:19 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	30.0	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-05-10-10.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-12
Project No:	6-0141-11	**Collection Date:**	07/25/19 09:15 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.23	9.23	26.4		mg/Kg-dry	1	08/05/19 10:00 AM
TPH-DRO >C10-C28	<9.23	9.23	26.4		mg/Kg-dry	1	08/05/19 10:00 AM
TPH-ORO >C28-C35	<9.23	9.23	26.4		mg/Kg-dry	1	08/05/19 10:00 AM
T/R Hydrocarbons: C6-C35	<9.23	9.23	26.4		mg/Kg-dry	1	08/05/19 10:00 AM
Surr: Isopropylbenzene	89.0	0	70-130		%REC	1	08/05/19 10:00 AM
Surr: Octacosane	97.4	0	70-130		%REC	1	08/05/19 10:00 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<26.3	26.3	65.9		mg/Kg-dry	10	08/05/19 05:35 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	25.4	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-05-15-15.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-13
Project No:	6-0141-11	**Collection Date:**	07/25/19 09:20 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.19	9.19	26.3		mg/Kg-dry	1	08/05/19 10:09 AM
TPH-DRO >C10-C28	<9.19	9.19	26.3		mg/Kg-dry	1	08/05/19 10:09 AM
TPH-ORO >C28-C35	<9.19	9.19	26.3		mg/Kg-dry	1	08/05/19 10:09 AM
T/R Hydrocarbons: C6-C35	<9.19	9.19	26.3		mg/Kg-dry	1	08/05/19 10:09 AM
Surr: Isopropylbenzene	87.4	0	70-130		%REC	1	08/05/19 10:09 AM
Surr: Octacosane	97.3	0	70-130		%REC	1	08/05/19 10:09 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	163	27.9	69.7		mg/Kg-dry	10	08/05/19 05:51 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	29.0	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-05-20-21
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-14
Project No:	6-0141-11	**Collection Date:**	07/25/19 09:25 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.28	7.28	20.8		mg/Kg-dry	1	08/05/19 10:18 AM
TPH-DRO >C10-C28	<7.28	7.28	20.8		mg/Kg-dry	1	08/05/19 10:18 AM
TPH-ORO >C28-C35	<7.28	7.28	20.8		mg/Kg-dry	1	08/05/19 10:18 AM
T/R Hydrocarbons: C6-C35	<7.28	7.28	20.8		mg/Kg-dry	1	08/05/19 10:18 AM
Surr: Isopropylbenzene	94.4	0	70-130		%REC	1	08/05/19 10:18 AM
Surr: Octacosane	98.4	0	70-130		%REC	1	08/05/19 10:18 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	26.5	20.5	51.2	J	mg/Kg-dry	10	08/05/19 06:07 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	4.84	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-01-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-15
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:00 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	1280	16.4	46.9		mg/Kg-dry	2	08/05/19 01:09 PM
TPH-DRO >C10-C28	801	16.4	46.9		mg/Kg-dry	2	08/05/19 01:09 PM
TPH-ORO >C28-C35	715	16.4	46.9		mg/Kg-dry	2	08/05/19 01:09 PM
T/R Hydrocarbons: C6-C35	2800	16.4	46.9		mg/Kg-dry	2	08/05/19 01:09 PM
Surr: Isopropylbenzene	193	0	70-130	S	%REC	2	08/05/19 01:09 PM
Surr: Octacosane	218	0	70-130	S	%REC	2	08/05/19 01:09 PM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	0.252	0.00132	0.00658	C	mg/Kg-dry	1	07/30/19 04:25 PM
Ethylbenzene	0.181	0.00132	0.00658	C	mg/Kg-dry	1	07/30/19 04:25 PM
Toluene	<0.00132	0.00132	0.00658	C	mg/Kg-dry	1	07/30/19 04:25 PM
Total Xylenes	19.7	0.130	0.648	C	mg/Kg-dry	100	07/30/19 07:43 PM
Surr: 1,2-Dichloroethane-d4	90.3	0	52-149		%REC	1	07/30/19 04:25 PM
Surr: 1,2-Dichloroethane-d4	79.7	0	52-149		%REC	100	07/30/19 07:43 PM
Surr: 4-Bromofluorobenzene	257	0	84-118	S	%REC	1	07/30/19 04:25 PM
Surr: 4-Bromofluorobenzene	122	0	84-118	S	%REC	100	07/30/19 07:43 PM
Surr: Dibromofluoromethane	87.1	0	65-135		%REC	1	07/30/19 04:25 PM
Surr: Dibromofluoromethane	93.5	0	65-135		%REC	100	07/30/19 07:43 PM
Surr: Toluene-d8	471	0	84-116	S	%REC	1	07/30/19 04:25 PM
Surr: Toluene-d8	126	0	84-116	S	%REC	100	07/30/19 07:43 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/28/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/09/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	28.2	0	0		WT%	1	08/05/19 10:00 AM

Qualifiers:

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-01-2.5-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-16
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:10 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	373	9.45	27.0		mg/Kg-dry	1	08/05/19 10:27 AM
TPH-DRO >C10-C28	407	9.45	27.0		mg/Kg-dry	1	08/05/19 10:27 AM
TPH-ORO >C28-C35	270	9.45	27.0		mg/Kg-dry	1	08/05/19 10:27 AM
T/R Hydrocarbons: C6-C35	1050	9.45	27.0		mg/Kg-dry	1	08/05/19 10:27 AM
Surr: Isopropylbenzene	110	0	70-130		%REC	1	08/05/19 10:27 AM
Surr: Octacosane	161	0	70-130	S	%REC	1	08/05/19 10:27 AM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/09/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	32.3	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-01-5-5.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-17
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:15 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	26.0	9.29	26.5	J	mg/Kg-dry	1	08/05/19 11:37 AM
TPH-DRO >C10-C28	101	9.29	26.5		mg/Kg-dry	1	08/05/19 11:37 AM
TPH-ORO >C28-C35	131	9.29	26.5		mg/Kg-dry	1	08/05/19 11:37 AM
T/R Hydrocarbons: C6-C35	258	9.29	26.5		mg/Kg-dry	1	08/05/19 11:37 AM
Surr: Isopropylbenzene	98.5	0	70-130		%REC	1	08/05/19 11:37 AM
Surr: Octacosane	143	0	70-130	S	%REC	1	08/05/19 11:37 AM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/09/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	27.5	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-01-7.5-8
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-18
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:20 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.83	8.83	25.2		mg/Kg-dry	1	08/05/19 11:46 AM
TPH-DRO >C10-C28	36.6	8.83	25.2		mg/Kg-dry	1	08/05/19 11:46 AM
TPH-ORO >C28-C35	29.6	8.83	25.2		mg/Kg-dry	1	08/05/19 11:46 AM
T/R Hydrocarbons: C6-C35	66.3	8.83	25.2		mg/Kg-dry	1	08/05/19 11:46 AM
Surr: Isopropylbenzene	91.1	0	70-130		%REC	1	08/05/19 11:46 AM
Surr: Octacosane	108	0	70-130		%REC	1	08/05/19 11:46 AM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/09/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	27.9	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-01-10-10.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-19
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:23 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.78	8.78	25.1		mg/Kg-dry	1	08/05/19 11:55 AM
TPH-DRO >C10-C28	<8.78	8.78	25.1		mg/Kg-dry	1	08/05/19 11:55 AM
TPH-ORO >C28-C35	<8.78	8.78	25.1		mg/Kg-dry	1	08/05/19 11:55 AM
T/R Hydrocarbons: C6-C35	<8.78	8.78	25.1		mg/Kg-dry	1	08/05/19 11:55 AM
Surr: Isopropylbenzene	91.3	0	70-130		%REC	1	08/05/19 11:55 AM
Surr: Octacosane	98.2	0	70-130		%REC	1	08/05/19 11:55 AM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/09/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	27.0	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-02-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-20
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:37 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	278	9.85	28.1		mg/Kg-dry	1	08/05/19 11:03 AM
TPH-DRO >C10-C28	650	9.85	28.1		mg/Kg-dry	1	08/05/19 11:03 AM
TPH-ORO >C28-C35	635	9.85	28.1		mg/Kg-dry	1	08/05/19 11:03 AM
T/R Hydrocarbons: C6-C35	1560	9.85	28.1		mg/Kg-dry	1	08/05/19 11:03 AM
Surr: Isopropylbenzene	112	0	70-130		%REC	1	08/05/19 11:03 AM
Surr: Octacosane	235	0	70-130	S	%REC	1	08/05/19 11:03 AM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	0.0241	0.00129	0.00646	C	mg/Kg-dry	1	07/30/19 04:53 PM
Ethylbenzene	<0.00129	0.00129	0.00646	C	mg/Kg-dry	1	07/30/19 04:53 PM
Toluene	<0.00129	0.00129	0.00646	C	mg/Kg-dry	1	07/30/19 04:53 PM
Total Xylenes	0.0200	0.00129	0.00646	C	mg/Kg-dry	1	07/30/19 04:53 PM
Surr: 1,2-Dichloroethane-d4	90.8	0	52-149		%REC	1	07/30/19 04:53 PM
Surr: 4-Bromofluorobenzene	180	0	84-118	S	%REC	1	07/30/19 04:53 PM
Surr: Dibromofluoromethane	97.0	0	65-135		%REC	1	07/30/19 04:53 PM
Surr: Toluene-d8	124	0	84-116	S	%REC	1	07/30/19 04:53 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/09/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	26.3	0	0		WT%	1	08/05/19 10:00 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-02-2.5-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-21
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:40 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	2930	44.1	126		mg/Kg-dry	5	08/06/19 03:13 PM
TPH-DRO >C10-C28	2590	44.1	126		mg/Kg-dry	5	08/06/19 03:13 PM
TPH-ORO >C28-C35	2430	44.1	126		mg/Kg-dry	5	08/06/19 03:13 PM
T/R Hydrocarbons: C6-C35	7950	44.1	126		mg/Kg-dry	5	08/06/19 03:13 PM
Surr: Isopropylbenzene	248	0	70-130	S	%REC	5	08/06/19 03:13 PM
Surr: Octacosane	569	0	70-130	S	%REC	5	08/06/19 03:13 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	27.1	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-02-5-5.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-22
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:45 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	11.3	9.09	26.0	J	mg/Kg-dry	1	08/06/19 10:10 AM
TPH-DRO >C10-C28	37.3	9.09	26.0		mg/Kg-dry	1	08/06/19 10:10 AM
TPH-ORO >C28-C35	45.3	9.09	26.0		mg/Kg-dry	1	08/06/19 10:10 AM
T/R Hydrocarbons: C6-C35	93.9	9.09	26.0		mg/Kg-dry	1	08/06/19 10:10 AM
Surr: Isopropylbenzene	93.4	0	70-130		%REC	1	08/06/19 10:10 AM
Surr: Octacosane	113	0	70-130		%REC	1	08/06/19 10:10 AM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	27.0	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-02-7.5-8
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-23
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:50 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.53	8.53	24.4		mg/Kg-dry	1	08/06/19 02:29 PM
TPH-DRO >C10-C28	<8.53	8.53	24.4		mg/Kg-dry	1	08/06/19 02:29 PM
TPH-ORO >C28-C35	<8.53	8.53	24.4		mg/Kg-dry	1	08/06/19 02:29 PM
T/R Hydrocarbons: C6-C35	<8.53	8.53	24.4		mg/Kg-dry	1	08/06/19 02:29 PM
Surr: Isopropylbenzene	95.9	0	70-130		%REC	1	08/06/19 02:29 PM
Surr: Octacosane	110	0	70-130		%REC	1	08/06/19 02:29 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	20.2	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-02-10-10.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-24
Project No:	6-0141-11	**Collection Date:**	07/25/19 10:55 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.40	9.40	26.9		mg/Kg-dry	1	08/06/19 10:28 AM
TPH-DRO >C10-C28	27.1	9.40	26.9		mg/Kg-dry	1	08/06/19 10:28 AM
TPH-ORO >C28-C35	17.7	9.40	26.9	J	mg/Kg-dry	1	08/06/19 10:28 AM
T/R Hydrocarbons: C6-C35	44.8	9.40	26.9		mg/Kg-dry	1	08/06/19 10:28 AM
Surr: Isopropylbenzene	86.8	0	70-130		%REC	1	08/06/19 10:28 AM
Surr: Octacosane	109	0	70-130		%REC	1	08/06/19 10:28 AM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	30.4	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-03-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-25
Project No:	6-0141-11	**Collection Date:**	07/25/19 12:00 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.03	8.03	23.0		mg/Kg-dry	1	08/06/19 10:37 AM
TPH-DRO >C10-C28	30.6	8.03	23.0		mg/Kg-dry	1	08/06/19 10:37 AM
TPH-ORO >C28-C35	20.5	8.03	23.0	J	mg/Kg-dry	1	08/06/19 10:37 AM
T/R Hydrocarbons: C6-C35	51.1	8.03	23.0		mg/Kg-dry	1	08/06/19 10:37 AM
Surr: Isopropylbenzene	83.1	0	70-130		%REC	1	08/06/19 10:37 AM
Surr: Octacosane	112	0	70-130		%REC	1	08/06/19 10:37 AM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	13.2	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-03-2.5-3.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-26
Project No:	6-0141-11	**Collection Date:**	07/25/19 12:05 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	896	50.5	144		mg/Kg-dry	5	08/06/19 02:47 PM
TPH-DRO >C10-C28	2810	50.5	144		mg/Kg-dry	5	08/06/19 02:47 PM
TPH-ORO >C28-C35	2610	50.5	144		mg/Kg-dry	5	08/06/19 02:47 PM
T/R Hydrocarbons: C6-C35	6320	50.5	144		mg/Kg-dry	5	08/06/19 02:47 PM
Surr: Isopropylbenzene	173	0	70-130	S	%REC	5	08/06/19 02:47 PM
Surr: Octacosane	473	0	70-130	S	%REC	5	08/06/19 02:47 PM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	0.00255	0.00147	0.00737	JC	mg/Kg-dry	1	07/30/19 03:55 PM
Ethylbenzene	<0.00147	0.00147	0.00737	C	mg/Kg-dry	1	07/30/19 03:55 PM
Toluene	<0.00147	0.00147	0.00737	C	mg/Kg-dry	1	07/30/19 03:55 PM
Total Xylenes	0.00224	0.00147	0.00737	JC	mg/Kg-dry	1	07/30/19 03:55 PM
Surr: 1,2-Dichloroethane-d4	108	0	52-149		%REC	1	07/30/19 03:55 PM
Surr: 4-Bromofluorobenzene	362	0	84-118	S	%REC	1	07/30/19 03:55 PM
Surr: Dibromofluoromethane	114	0	65-135		%REC	1	07/30/19 03:55 PM
Surr: Toluene-d8	111	0	84-116		%REC	1	07/30/19 03:55 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	36.9	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-03-5-5.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-27
Project No:	6-0141-11	**Collection Date:**	07/25/19 12:09 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	93.9	8.88	25.4		mg/Kg-dry	1	08/06/19 01:54 PM
TPH-DRO >C10-C28	523	8.88	25.4		mg/Kg-dry	1	08/06/19 01:54 PM
TPH-ORO >C28-C35	291	8.88	25.4		mg/Kg-dry	1	08/06/19 01:54 PM
T/R Hydrocarbons: C6-C35	908	8.88	25.4		mg/Kg-dry	1	08/06/19 01:54 PM
Surr: Isopropylbenzene	103	0	70-130		%REC	1	08/06/19 01:54 PM
Surr: Octacosane	169	0	70-130	S	%REC	1	08/06/19 01:54 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	22.4	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-03-7.5-7.75
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-28
Project No:	6-0141-11	**Collection Date:**	07/25/19 12:12 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	109	8.99	25.7		mg/Kg-dry	1	08/06/19 02:03 PM
TPH-DRO >C10-C28	564	8.99	25.7		mg/Kg-dry	1	08/06/19 02:03 PM
TPH-ORO >C28-C35	486	8.99	25.7		mg/Kg-dry	1	08/06/19 02:03 PM
T/R Hydrocarbons: C6-C35	1160	8.99	25.7		mg/Kg-dry	1	08/06/19 02:03 PM
Surr: Isopropylbenzene	97.3	0	70-130		%REC	1	08/06/19 02:03 PM
Surr: Octacosane	359	0	70-130	S	%REC	1	08/06/19 02:03 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	28.3	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-03-10-10.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-29
Project No:	6-0141-11	**Collection Date:**	07/25/19 12:17 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.34	8.34	23.8		mg/Kg-dry	1	08/06/19 02:12 PM
TPH-DRO >C10-C28	241	8.34	23.8		mg/Kg-dry	1	08/06/19 02:12 PM
TPH-ORO >C28-C35	73.8	8.34	23.8		mg/Kg-dry	1	08/06/19 02:12 PM
T/R Hydrocarbons: C6-C35	315	8.34	23.8		mg/Kg-dry	1	08/06/19 02:12 PM
Surr: Isopropylbenzene	92.3	0	70-130		%REC	1	08/06/19 02:12 PM
Surr: Octacosane	297	0	70-130	S	%REC	1	08/06/19 02:12 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	19.3	0	0		WT%	1	08/05/19 08:45 AM

Qualifiers:

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-04-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-30
Project No:	6-0141-11	**Collection Date:**	07/25/19 12:55 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.81	9.81	28.0		mg/Kg-dry	1	08/06/19 02:20 PM
TPH-DRO >C10-C28	28.6	9.81	28.0		mg/Kg-dry	1	08/06/19 02:20 PM
TPH-ORO >C28-C35	17.8	9.81	28.0	J	mg/Kg-dry	1	08/06/19 02:20 PM
T/R Hydrocarbons: C6-C35	46.4	9.81	28.0		mg/Kg-dry	1	08/06/19 02:20 PM
Surr: Isopropylbenzene	48.4	0	70-130	S	%REC	1	08/06/19 02:20 PM
Surr: Octacosane	110	0	70-130		%REC	1	08/06/19 02:20 PM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	0.0223	0.00148	0.00739	C	mg/Kg-dry	1	07/30/19 08:38 PM
Ethylbenzene	0.0114	0.00148	0.00739	C	mg/Kg-dry	1	07/30/19 08:38 PM
Toluene	0.0366	0.00148	0.00739	C	mg/Kg-dry	1	07/30/19 08:38 PM
Total Xylenes	0.0130	0.00148	0.00739	C	mg/Kg-dry	1	07/30/19 08:38 PM
Surr: 1,2-Dichloroethane-d4	88.5	0	52-149		%REC	1	07/30/19 08:38 PM
Surr: 4-Bromofluorobenzene	94.0	0	84-118		%REC	1	07/30/19 08:38 PM
Surr: Dibromofluoromethane	100	0	65-135		%REC	1	07/30/19 08:38 PM
Surr: Toluene-d8	91.4	0	84-116		%REC	1	07/30/19 08:38 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	35.3	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-04-2.5-4
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-31
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:00 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	72.2	9.23	26.4		mg/Kg-dry	1	08/06/19 12:02 PM
TPH-DRO >C10-C28	165	9.23	26.4		mg/Kg-dry	1	08/06/19 12:02 PM
TPH-ORO >C28-C35	132	9.23	26.4		mg/Kg-dry	1	08/06/19 12:02 PM
T/R Hydrocarbons: C6-C35	369	9.23	26.4		mg/Kg-dry	1	08/06/19 12:02 PM
Surr: Isopropylbenzene	102	0	70-130		%REC	1	08/06/19 12:02 PM
Surr: Octacosane	144	0	70-130	S	%REC	1	08/06/19 12:02 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	28.3	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-04-5-7
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-32
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:05 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	3240	44.6	127		mg/Kg-dry	5	08/06/19 03:41 PM
TPH-DRO >C10-C28	1560	44.6	127		mg/Kg-dry	5	08/06/19 03:41 PM
TPH-ORO >C28-C35	1430	44.6	127		mg/Kg-dry	5	08/06/19 03:41 PM
T/R Hydrocarbons: C6-C35	6240	44.6	127		mg/Kg-dry	5	08/06/19 03:41 PM
Surr: Isopropylbenzene	313	0	70-130	S	%REC	5	08/06/19 03:41 PM
Surr: Octacosane	342	0	70-130	S	%REC	5	08/06/19 03:41 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	32.8	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-04-7.5-9
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-33
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:15 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	2170	17.5	50.0		mg/Kg-dry	2	08/06/19 02:38 PM
TPH-DRO >C10-C28	208	17.5	50.0		mg/Kg-dry	2	08/06/19 02:38 PM
TPH-ORO >C28-C35	66.9	17.5	50.0		mg/Kg-dry	2	08/06/19 02:38 PM
T/R Hydrocarbons: C6-C35	2440	17.5	50.0		mg/Kg-dry	2	08/06/19 02:38 PM
Surr: Isopropylbenzene	160	0	70-130	S	%REC	2	08/06/19 02:38 PM
Surr: Octacosane	94.7	0	70-130		%REC	2	08/06/19 02:38 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	23.9	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	03-04-10-10.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-34
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:20 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	91.2	8.05	23.0		mg/Kg-dry	1	08/06/19 12:20 PM
TPH-DRO >C10-C28	152	8.05	23.0		mg/Kg-dry	1	08/06/19 12:20 PM
TPH-ORO >C28-C35	159	8.05	23.0		mg/Kg-dry	1	08/06/19 12:20 PM
T/R Hydrocarbons: C6-C35	402	8.05	23.0		mg/Kg-dry	1	08/06/19 12:20 PM
Surr: Isopropylbenzene	97.7	0	70-130		%REC	1	08/06/19 12:20 PM
Surr: Octacosane	128	0	70-130		%REC	1	08/06/19 12:20 PM
ORGANIC AMINES IN SOLID		**E1671/8015**					Analyst: **SUB**
Diethanolamine	<500	500	500	NH	mg/Kg-dry	1	08/29/19
Monoethanolamine	<50.0	50.0	50.0	NH	mg/Kg	1	08/12/19
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	29.3	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-01-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-35
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:35 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<10.8	10.8	31.0		mg/Kg-dry	1	08/06/19 12:29 PM
TPH-DRO >C10-C28	43.6	10.8	31.0		mg/Kg-dry	1	08/06/19 12:29 PM
TPH-ORO >C28-C35	26.8	10.8	31.0	J	mg/Kg-dry	1	08/06/19 12:29 PM
T/R Hydrocarbons: C6-C35	70.4	10.8	31.0		mg/Kg-dry	1	08/06/19 12:29 PM
Surr: Isopropylbenzene	60.4	0	70-130	S	%REC	1	08/06/19 12:29 PM
Surr: Octacosane	114	0	70-130		%REC	1	08/06/19 12:29 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	77.2	29.2	73.1		mg/Kg-dry	10	08/05/19 06:23 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	35.5	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-01-2.5-4
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-36
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:40 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.90	7.90	22.6		mg/Kg-dry	1	08/06/19 12:38 PM
TPH-DRO >C10-C28	<7.90	7.90	22.6		mg/Kg-dry	1	08/06/19 12:38 PM
TPH-ORO >C28-C35	<7.90	7.90	22.6		mg/Kg-dry	1	08/06/19 12:38 PM
T/R Hydrocarbons: C6-C35	<7.90	7.90	22.6		mg/Kg-dry	1	08/06/19 12:38 PM
Surr: Isopropylbenzene	59.4	0	70-130	S	%REC	1	08/06/19 12:38 PM
Surr: Octacosane	99.9	0	70-130		%REC	1	08/06/19 12:38 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	467	26.0	65.1		mg/Kg-dry	10	08/05/19 06:39 PM
PERCENT MOISTURE		**D2216**					Analyst: **CC**
Percent Moisture	24.5	0	0		WT%	1	08/05/19 08:45 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-01-5-6.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-37
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:45 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.08	8.08	23.1		mg/Kg-dry	1	08/06/19 12:47 PM
TPH-DRO >C10-C28	<8.08	8.08	23.1		mg/Kg-dry	1	08/06/19 12:47 PM
TPH-ORO >C28-C35	<8.08	8.08	23.1		mg/Kg-dry	1	08/06/19 12:47 PM
T/R Hydrocarbons: C6-C35	<8.08	8.08	23.1		mg/Kg-dry	1	08/06/19 12:47 PM
Surr: Isopropylbenzene	74.3	0	70-130		%REC	1	08/06/19 12:47 PM
Surr: Octacosane	100	0	70-130		%REC	1	08/06/19 12:47 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	238	27.9	69.7		mg/Kg-dry	10	08/05/19 06:55 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	32.0	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-01-7.5-9
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-38
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:46 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.53	9.53	27.2		mg/Kg-dry	1	08/06/19 12:56 PM
TPH-DRO >C10-C28	<9.53	9.53	27.2		mg/Kg-dry	1	08/06/19 12:56 PM
TPH-ORO >C28-C35	<9.53	9.53	27.2		mg/Kg-dry	1	08/06/19 12:56 PM
T/R Hydrocarbons: C6-C35	<9.53	9.53	27.2		mg/Kg-dry	1	08/06/19 12:56 PM
Surr: Isopropylbenzene	82.5	0	70-130		%REC	1	08/06/19 12:56 PM
Surr: Octacosane	100	0	70-130		%REC	1	08/06/19 12:56 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	191	25.7	64.3		mg/Kg-dry	10	08/05/19 07:11 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	26.7	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-01-10-10.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-39
Project No:	6-0141-11	**Collection Date:**	07/25/19 01:50 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.76	7.76	22.2		mg/Kg-dry	1	08/06/19 01:05 PM
TPH-DRO >C10-C28	<7.76	7.76	22.2		mg/Kg-dry	1	08/06/19 01:05 PM
TPH-ORO >C28-C35	<7.76	7.76	22.2		mg/Kg-dry	1	08/06/19 01:05 PM
T/R Hydrocarbons: C6-C35	<7.76	7.76	22.2		mg/Kg-dry	1	08/06/19 01:05 PM
Surr: Isopropylbenzene	73.9	0	70-130		%REC	1	08/06/19 01:05 PM
Surr: Octacosane	98.1	0	70-130		%REC	1	08/06/19 01:05 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	75.1	26.7	66.8		mg/Kg-dry	10	08/05/19 07:27 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	27.7	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-02-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-40
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:10 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.24	9.24	26.4		mg/Kg-dry	1	08/06/19 01:13 PM
TPH-DRO >C10-C28	25.8	9.24	26.4	J	mg/Kg-dry	1	08/06/19 01:13 PM
TPH-ORO >C28-C35	12.4	9.24	26.4	J	mg/Kg-dry	1	08/06/19 01:13 PM
T/R Hydrocarbons: C6-C35	38.2	9.24	26.4		mg/Kg-dry	1	08/06/19 01:13 PM
Surr: Isopropylbenzene	68.7	0	70-130	S	%REC	1	08/06/19 01:13 PM
Surr: Octacosane	116	0	70-130		%REC	1	08/06/19 01:13 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	273	26.9	67.1		mg/Kg-dry	10	08/05/19 07:43 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	26.3	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-02-2.5-4
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-41
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:15 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.01	9.01	25.8		mg/Kg-dry	1	08/06/19 04:40 PM
TPH-DRO >C10-C28	<9.01	9.01	25.8		mg/Kg-dry	1	08/06/19 04:40 PM
TPH-ORO >C28-C35	<9.01	9.01	25.8		mg/Kg-dry	1	08/06/19 04:40 PM
T/R Hydrocarbons: C6-C35	<9.01	9.01	25.8		mg/Kg-dry	1	08/06/19 04:40 PM
Surr: Isopropylbenzene	81.9	0	70-130		%REC	1	08/06/19 04:40 PM
Surr: Octacosane	96.1	0	70-130		%REC	1	08/06/19 04:40 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	306	24.1	60.2		mg/Kg-dry	10	08/06/19 06:33 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	23.1	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-02-5-6.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-42
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:20 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.30	8.30	23.7		mg/Kg-dry	1	08/06/19 04:49 PM
TPH-DRO >C10-C28	<8.30	8.30	23.7		mg/Kg-dry	1	08/06/19 04:49 PM
TPH-ORO >C28-C35	<8.30	8.30	23.7		mg/Kg-dry	1	08/06/19 04:49 PM
T/R Hydrocarbons: C6-C35	<8.30	8.30	23.7		mg/Kg-dry	1	08/06/19 04:49 PM
Surr: Isopropylbenzene	91.6	0	70-130		%REC	1	08/06/19 04:49 PM
Surr: Octacosane	98.0	0	70-130		%REC	1	08/06/19 04:49 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	291	23.4	58.4		mg/Kg-dry	10	08/06/19 06:49 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	18.3	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-02-7.5-8
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-43
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:21 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<10.5	10.5	29.9		mg/Kg-dry	1	08/06/19 04:58 PM
TPH-DRO >C10-C28	<10.5	10.5	29.9		mg/Kg-dry	1	08/06/19 04:58 PM
TPH-ORO >C28-C35	<10.5	10.5	29.9		mg/Kg-dry	1	08/06/19 04:58 PM
T/R Hydrocarbons: C6-C35	<10.5	10.5	29.9		mg/Kg-dry	1	08/06/19 04:58 PM
Surr: Isopropylbenzene	91.3	0	70-130		%REC	1	08/06/19 04:58 PM
Surr: Octacosane	96.9	0	70-130		%REC	1	08/06/19 04:58 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	294	29.2	73.1		mg/Kg-dry	10	08/06/19 07:05 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	34.2	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-02-10-11.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-44
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:25 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.10	7.10	20.3		mg/Kg-dry	1	08/06/19 05:07 PM
TPH-DRO >C10-C28	<7.10	7.10	20.3		mg/Kg-dry	1	08/06/19 05:07 PM
TPH-ORO >C28-C35	<7.10	7.10	20.3		mg/Kg-dry	1	08/06/19 05:07 PM
T/R Hydrocarbons: C6-C35	<7.10	7.10	20.3		mg/Kg-dry	1	08/06/19 05:07 PM
Surr: Isopropylbenzene	90.6	0	70-130		%REC	1	08/06/19 05:07 PM
Surr: Octacosane	99.5	0	70-130		%REC	1	08/06/19 05:07 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	186	19.4	48.5		mg/Kg-dry	10	08/06/19 07:21 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	2.65	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-03-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-45
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:40 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.86	8.86	25.3		mg/Kg-dry	1	08/06/19 07:39 PM
TPH-DRO >C10-C28	51.4	8.86	25.3		mg/Kg-dry	1	08/06/19 07:39 PM
TPH-ORO >C28-C35	14.2	8.86	25.3	J	mg/Kg-dry	1	08/06/19 07:39 PM
T/R Hydrocarbons: C6-C35	65.6	8.86	25.3		mg/Kg-dry	1	08/06/19 07:39 PM
Surr: Isopropylbenzene	71.2	0	70-130		%REC	1	08/06/19 07:39 PM
Surr: Octacosane	116	0	70-130		%REC	1	08/06/19 07:39 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	787	24.9	62.3		mg/Kg-dry	10	08/06/19 07:37 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	22.2	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-03-2.5-4
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-46
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:50 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.45	8.45	24.1		mg/Kg-dry	1	08/06/19 05:16 PM
TPH-DRO >C10-C28	<8.45	8.45	24.1		mg/Kg-dry	1	08/06/19 05:16 PM
TPH-ORO >C28-C35	<8.45	8.45	24.1		mg/Kg-dry	1	08/06/19 05:16 PM
T/R Hydrocarbons: C6-C35	<8.45	8.45	24.1		mg/Kg-dry	1	08/06/19 05:16 PM
Surr: Isopropylbenzene	87.9	0	70-130		%REC	1	08/06/19 05:16 PM
Surr: Octacosane	98.6	0	70-130		%REC	1	08/06/19 05:16 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	318	23.9	59.7		mg/Kg-dry	10	08/06/19 07:53 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	19.1	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-03-5-6.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-47
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:52 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.02	8.02	22.9		mg/Kg-dry	1	08/06/19 05:25 PM
TPH-DRO >C10-C28	14.8	8.02	22.9	J	mg/Kg-dry	1	08/06/19 05:25 PM
TPH-ORO >C28-C35	<8.02	8.02	22.9		mg/Kg-dry	1	08/06/19 05:25 PM
T/R Hydrocarbons: C6-C35	14.8	8.02	22.9	J	mg/Kg-dry	1	08/06/19 05:25 PM
Surr: Isopropylbenzene	91.9	0	70-130		%REC	1	08/06/19 05:25 PM
Surr: Octacosane	97.9	0	70-130		%REC	1	08/06/19 05:25 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	300	22.7	56.7		mg/Kg-dry	10	08/06/19 08:09 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.5	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-03-7.5-9
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-48
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:55 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.37	8.37	23.9		mg/Kg-dry	1	08/06/19 05:34 PM
TPH-DRO >C10-C28	<8.37	8.37	23.9		mg/Kg-dry	1	08/06/19 05:34 PM
TPH-ORO >C28-C35	<8.37	8.37	23.9		mg/Kg-dry	1	08/06/19 05:34 PM
T/R Hydrocarbons: C6-C35	<8.37	8.37	23.9		mg/Kg-dry	1	08/06/19 05:34 PM
Surr: Isopropylbenzene	86.7	0	70-130		%REC	1	08/06/19 05:34 PM
Surr: Octacosane	102	0	70-130		%REC	1	08/06/19 05:34 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	296	23.2	58.1		mg/Kg-dry	10	08/06/19 08:25 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	18.3	0	0		WT%	1	08/07/19 08:40 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	02-03-10-12
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-49
Project No:	6-0141-11	**Collection Date:**	07/25/19 02:58 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.13	8.13	23.2		mg/Kg-dry	1	08/06/19 05:43 PM
TPH-DRO >C10-C28	<8.13	8.13	23.2		mg/Kg-dry	1	08/06/19 05:43 PM
TPH-ORO >C28-C35	<8.13	8.13	23.2		mg/Kg-dry	1	08/06/19 05:43 PM
T/R Hydrocarbons: C6-C35	<8.13	8.13	23.2		mg/Kg-dry	1	08/06/19 05:43 PM
Surr: Isopropylbenzene	89.2	0	70-130		%REC	1	08/06/19 05:43 PM
Surr: Octacosane	97.5	0	70-130		%REC	1	08/06/19 05:43 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	252	23.2	58.0		mg/Kg-dry	10	08/06/19 08:41 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.6	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-01-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-50
Project No:	6-0141-11	**Collection Date:**	07/25/19 03:23 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.66	8.66	24.7		mg/Kg-dry	1	08/06/19 05:52 PM
TPH-DRO >C10-C28	<8.66	8.66	24.7		mg/Kg-dry	1	08/06/19 05:52 PM
TPH-ORO >C28-C35	<8.66	8.66	24.7		mg/Kg-dry	1	08/06/19 05:52 PM
T/R Hydrocarbons: C6-C35	<8.66	8.66	24.7		mg/Kg-dry	1	08/06/19 05:52 PM
Surr: Isopropylbenzene	91.4	0	70-130		%REC	1	08/06/19 05:52 PM
Surr: Octacosane	95.9	0	70-130		%REC	1	08/06/19 05:52 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	21.4	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-01-2.5-4
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-51
Project No:	6-0141-11	**Collection Date:**	07/25/19 03:30 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.51	8.51	24.3		mg/Kg-dry	1	08/06/19 06:01 PM
TPH-DRO >C10-C28	<8.51	8.51	24.3		mg/Kg-dry	1	08/06/19 06:01 PM
TPH-ORO >C28-C35	<8.51	8.51	24.3		mg/Kg-dry	1	08/06/19 06:01 PM
T/R Hydrocarbons: C6-C35	<8.51	8.51	24.3		mg/Kg-dry	1	08/06/19 06:01 PM
Surr: Isopropylbenzene	88.7	0	70-130		%REC	1	08/06/19 06:01 PM
Surr: Octacosane	100	0	70-130		%REC	1	08/06/19 06:01 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	21.3	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-01-5-6.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-52
Project No:	6-0141-11	**Collection Date:**	07/25/19 03:35 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.54	8.54	24.4		mg/Kg-dry	1	08/06/19 07:48 PM
TPH-DRO >C10-C28	<8.54	8.54	24.4		mg/Kg-dry	1	08/06/19 07:48 PM
TPH-ORO >C28-C35	<8.54	8.54	24.4		mg/Kg-dry	1	08/06/19 07:48 PM
T/R Hydrocarbons: C6-C35	<8.54	8.54	24.4		mg/Kg-dry	1	08/06/19 07:48 PM
Surr: Isopropylbenzene	85.5	0	70-130		%REC	1	08/06/19 07:48 PM
Surr: Octacosane	101	0	70-130		%REC	1	08/06/19 07:48 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	19.0	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-01-7.5-8
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-53
Project No:	6-0141-11	**Collection Date:**	07/25/19 03:37 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<10.5	10.5	29.9		mg/Kg-dry	1	08/06/19 06:09 PM
TPH-DRO >C10-C28	<10.5	10.5	29.9		mg/Kg-dry	1	08/06/19 06:09 PM
TPH-ORO >C28-C35	<10.5	10.5	29.9		mg/Kg-dry	1	08/06/19 06:09 PM
T/R Hydrocarbons: C6-C35	<10.5	10.5	29.9		mg/Kg-dry	1	08/06/19 06:09 PM
Surr: Isopropylbenzene	80.3	0	70-130		%REC	1	08/06/19 06:09 PM
Surr: Octacosane	102	0	70-130		%REC	1	08/06/19 06:09 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	34.4	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-01-10-11
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-54
Project No:	6-0141-11	**Collection Date:**	07/25/19 03:42 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.04	9.04	25.8		mg/Kg-dry	1	08/06/19 06:18 PM
TPH-DRO >C10-C28	<9.04	9.04	25.8		mg/Kg-dry	1	08/06/19 06:18 PM
TPH-ORO >C28-C35	<9.04	9.04	25.8		mg/Kg-dry	1	08/06/19 06:18 PM
T/R Hydrocarbons: C6-C35	<9.04	9.04	25.8		mg/Kg-dry	1	08/06/19 06:18 PM
Surr: Isopropylbenzene	90.6	0	70-130		%REC	1	08/06/19 06:18 PM
Surr: Octacosane	104	0	70-130		%REC	1	08/06/19 06:18 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	22.9	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-02-0-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-55
Project No:	6-0141-11	**Collection Date:**	07/25/19 04:00 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.36	9.36	26.7		mg/Kg-dry	1	08/06/19 06:27 PM
TPH-DRO >C10-C28	<9.36	9.36	26.7		mg/Kg-dry	1	08/06/19 06:27 PM
TPH-ORO >C28-C35	<9.36	9.36	26.7		mg/Kg-dry	1	08/06/19 06:27 PM
T/R Hydrocarbons: C6-C35	<9.36	9.36	26.7		mg/Kg-dry	1	08/06/19 06:27 PM
Surr: Isopropylbenzene	76.4	0	70-130		%REC	1	08/06/19 06:27 PM
Surr: Octacosane	96.2	0	70-130		%REC	1	08/06/19 06:27 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	25.9	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-02-2.5-4
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-56
Project No:	6-0141-11	**Collection Date:**	07/25/19 04:01 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<9.02	9.02	25.8		mg/Kg-dry	1	08/06/19 07:57 PM
TPH-DRO >C10-C28	<9.02	9.02	25.8		mg/Kg-dry	1	08/06/19 07:57 PM
TPH-ORO >C28-C35	<9.02	9.02	25.8		mg/Kg-dry	1	08/06/19 07:57 PM
T/R Hydrocarbons: C6-C35	<9.02	9.02	25.8		mg/Kg-dry	1	08/06/19 07:57 PM
Surr: Isopropylbenzene	69.4	0	70-130	S	%REC	1	08/06/19 07:57 PM
Surr: Octacosane	98.4	0	70-130		%REC	1	08/06/19 07:57 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	24.7	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-02-5-5.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-57
Project No:	6-0141-11	**Collection Date:**	07/25/19 04:05 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<7.53	7.53	21.5		mg/Kg-dry	1	08/06/19 06:36 PM
TPH-DRO >C10-C28	<7.53	7.53	21.5		mg/Kg-dry	1	08/06/19 06:36 PM
TPH-ORO >C28-C35	<7.53	7.53	21.5		mg/Kg-dry	1	08/06/19 06:36 PM
T/R Hydrocarbons: C6-C35	<7.53	7.53	21.5		mg/Kg-dry	1	08/06/19 06:36 PM
Surr: Isopropylbenzene	97.5	0	70-130		%REC	1	08/06/19 06:36 PM
Surr: Octacosane	103	0	70-130		%REC	1	08/06/19 06:36 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	8.45	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-02-7.5-8.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-58
Project No:	6-0141-11	**Collection Date:**	07/25/19 04:10 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.72	8.72	24.9		mg/Kg-dry	1	08/06/19 06:45 PM
TPH-DRO >C10-C28	<8.72	8.72	24.9		mg/Kg-dry	1	08/06/19 06:45 PM
TPH-ORO >C28-C35	<8.72	8.72	24.9		mg/Kg-dry	1	08/06/19 06:45 PM
T/R Hydrocarbons: C6-C35	<8.72	8.72	24.9		mg/Kg-dry	1	08/06/19 06:45 PM
Surr: Isopropylbenzene	94.1	0	70-130		%REC	1	08/06/19 06:45 PM
Surr: Octacosane	98.7	0	70-130		%REC	1	08/06/19 06:45 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	20.3	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	08-02-10-10.25
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-59
Project No:	6-0141-11	**Collection Date:**	07/25/19 04:15 PM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<8.21	8.21	23.5		mg/Kg-dry	1	08/06/19 06:54 PM
TPH-DRO >C10-C28	<8.21	8.21	23.5		mg/Kg-dry	1	08/06/19 06:54 PM
TPH-ORO >C28-C35	<8.21	8.21	23.5		mg/Kg-dry	1	08/06/19 06:54 PM
T/R Hydrocarbons: C6-C35	<8.21	8.21	23.5		mg/Kg-dry	1	08/06/19 06:54 PM
Surr: Isopropylbenzene	99.4	0	70-130		%REC	1	08/06/19 06:54 PM
Surr: Octacosane	107	0	70-130		%REC	1	08/06/19 06:54 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	16.1	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-04-2.5-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-60
Project No:	6-0141-11	**Collection Date:**	07/25/19 08:03 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<10.0	10.0	28.7		mg/Kg-dry	1	08/06/19 07:03 PM
TPH-DRO >C10-C28	<10.0	10.0	28.7		mg/Kg-dry	1	08/06/19 07:03 PM
TPH-ORO >C28-C35	<10.0	10.0	28.7		mg/Kg-dry	1	08/06/19 07:03 PM
T/R Hydrocarbons: C6-C35	<10.0	10.0	28.7		mg/Kg-dry	1	08/06/19 07:03 PM
Surr: Isopropylbenzene	73.7	0	70-130		%REC	1	08/06/19 07:03 PM
Surr: Octacosane	98.4	0	70-130		%REC	1	08/06/19 07:03 PM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	60.8	27.6	69.0	J	mg/Kg-dry	10	08/06/19 08:57 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	30.4	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc.

Date: *30-Aug-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	06-05-2-2.5
Project:	AKA Energy/Empire ABO	**Lab ID:**	1907389-61
Project No:	6-0141-11	**Collection Date:**	07/24/19 09:09 AM
Lab Order:	1907389	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH IN SOIL/SOLID BY CWG METHOD		**CWG/1005**					Analyst: **BTJ**
TPH-GRO C6-C10	<10.1	10.1	28.8		mg/Kg-dry	1	08/07/19 09:18 AM
TPH-DRO >C10-C28	<10.1	10.1	28.8		mg/Kg-dry	1	08/07/19 09:18 AM
TPH-ORO >C28-C35	<10.1	10.1	28.8		mg/Kg-dry	1	08/07/19 09:18 AM
T/R Hydrocarbons: C6-C35	<10.1	10.1	28.8		mg/Kg-dry	1	08/07/19 09:18 AM
Surr: Isopropylbenzene	102	0	70-130		%REC	1	08/07/19 09:18 AM
Surr: Octacosane	102	0	70-130		%REC	1	08/07/19 09:18 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **SNM**
Chloride	<29.6	29.6	73.9		mg/Kg-dry	10	08/06/19 10:33 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	34.8	0	0		WT%	1	08/06/19 08:35 AM

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

DHL Analytical, Inc. **Date:** *30-Aug-19*

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190805A

The QC data in batch 92131 applies to the following samples: 1907389-01A, 1907389-02A, 1907389-03A, 1907389-04A, 1907389-05A, 1907389-06A, 1907389-07A, 1907389-08A, 1907389-09A, 1907389-10A, 1907389-11A, 1907389-12A, 1907389-13A, 1907389-14A, 1907389-15A, 1907389-16A, 1907389-17A, 1907389-18A, 1907389-19A, 1907389-20A

Sample ID **MB-92131** Batch ID: **92131** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC12_190805A** Analysis Date: **8/5/2019 8:09:41 AM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO C6-C10	<7.00	20.0								
TPH-DRO >C10-C28	<7.00	20.0								
TPH-ORO >C28-C35	<7.00	20.0								
T/R Hydrocarbons: C6-C35	<7.00	20.0								
Surr: Isopropylbenzene	22.7		25.00		90.7	70	130			
Surr: Octacosane	23.7		25.00		94.6	70	130			

Sample ID **LCS-92131** Batch ID: **92131** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC12_190805A** Analysis Date: **8/5/2019 8:18:39 AM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	235	20.0	250.0	0	94.0	75	125			
Surr: Isopropylbenzene	25.7		25.00		103	70	130			
Surr: Octacosane	26.2		25.00		105	70	130			

Sample ID **LCSD-92131** Batch ID: **92131** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCSD** Run ID: **GC12_190805A** Analysis Date: **8/5/2019 8:27:36 AM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	222	20.0	250.0	0	89.0	75	125	5.51	20	
Surr: Isopropylbenzene	24.0		25.00		96.0	70	130	0	0	
Surr: Octacosane	24.0		25.00		95.9	70	130	0	0	

Sample ID **1907389-01AMS** Batch ID: **92131** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC12_190805A** Analysis Date: **8/5/2019 12:14:47 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	438	24.3	304.1	166.3	89.4	70	119			
Surr: Octacosane	40.5		30.41		133	70	130			S

Sample ID **1907389-01AMSD** Batch ID: **92131** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC12_190805A** Analysis Date: **8/5/2019 12:23:44 PM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	363	23.4	292.5	166.3	67.3	75	125	18.7	20	S
Surr: Octacosane	37.1		29.25		127	70	130	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190805A

Sample ID **ICV-190805**	Batch ID: **R105568**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC12_190805A**	Analysis Date: **8/5/2019 7:56:09 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	912	20.0	1000	0	91.2	75	125			
Surr: Isopropylbenzene	49.1		50.00		98.3	70	130			
Surr: Octacosane	48.2		50.00		96.5	70	130			

Sample ID **CCV1-190805**	Batch ID: **R105568**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC12_190805A**	Analysis Date: **8/5/2019 1:27:05 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	452	20.0	500.0	0	90.4	75	125			
Surr: Isopropylbenzene	21.9		25.00		87.8	70	130			
Surr: Octacosane	21.7		25.00		86.7	70	130			

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190806A

The QC data in batch 92164 applies to the following samples: 1907389-21A, 1907389-22A, 1907389-23A, 1907389-24A, 1907389-25A, 1907389-26A, 1907389-27A, 1907389-28A, 1907389-29A, 1907389-30A, 1907389-31A, 1907389-32A, 1907389-33A, 1907389-34A, 1907389-35A, 1907389-36A, 1907389-37A, 1907389-38A, 1907389-39A, 1907389-40A

Sample ID **MB-92164** Batch ID: **92164** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC12_190806A** Analysis Date: **8/6/2019 9:41:48 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO C6-C10	<7.00	20.0								
TPH-DRO >C10-C28	<7.00	20.0								
TPH-ORO >C28-C35	<7.00	20.0								
T/R Hydrocarbons: C6-C35	<7.00	20.0								
Surr: Isopropylbenzene	24.5		25.00		98.0	70	130			
Surr: Octacosane	25.5		25.00		102	70	130			

Sample ID **LCS-92164** Batch ID: **92164** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC12_190806A** Analysis Date: **8/6/2019 9:50:46 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	232	20.0	250.0	0	92.7	75	125			
Surr: Isopropylbenzene	25.9		25.00		104	70	130			
Surr: Octacosane	24.8		25.00		99.3	70	130			

Sample ID **LCSD-92164** Batch ID: **92164** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCSD** Run ID: **GC12_190806A** Analysis Date: **8/6/2019 9:59:43 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	226	20.0	250.0	0	90.6	75	125	2.32	20	
Surr: Isopropylbenzene	24.4		25.00		97.7	70	130	0	0	
Surr: Octacosane	24.8		25.00		99.4	70	130	0	0	

Sample ID **1907389-40AMS** Batch ID: **92164** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC12_190806A** Analysis Date: **8/6/2019 1:22:56 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	268	25.8	322.2	38.17	71.5	70	119			
Surr: Isopropylbenzene	25.8		32.22		80.0	70	130			
Surr: Octacosane	35.6		32.22		111	70	130			

Sample ID **1907389-40AMSD** Batch ID: **92164** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC12_190806A** Analysis Date: **8/6/2019 1:36:12 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	295	27.0	337.3	38.17	76.2	75	125	9.54	20	
Surr: Isopropylbenzene	27.6		33.73		81.7	70	130	0	0	
Surr: Octacosane	34.1		33.73		101	70	130	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190806A

Sample ID	ICV-190806	Batch ID:	R105598	TestNo:	CWG/1005	Units:	mg/Kg
SampType:	ICV	Run ID:	GC12_190806A	Analysis Date:	8/6/2019 8:34:08 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	977	20.0	1000	0	97.7	75	125			
Surr: Isopropylbenzene	52.9		50.00		106	70	130			
Surr: Octacosane	53.6		50.00		107	70	130			

Sample ID	CCV1-190806	Batch ID:	R105598	TestNo:	CWG/1005	Units:	mg/Kg
SampType:	CCV	Run ID:	GC12_190806A	Analysis Date:	8/6/2019 3:59:27 PM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	406	20.0	500.0	0	81.1	75	125			
Surr: Isopropylbenzene	19.3		25.00		77.2	70	130			
Surr: Octacosane	20.5		25.00		82.0	70	130			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190806B

The QC data in batch 92165 applies to the following samples: 1907389-41A, 1907389-42A, 1907389-43A, 1907389-44A, 1907389-45A, 1907389-46A, 1907389-47A, 1907389-48A, 1907389-49A, 1907389-50A, 1907389-51A, 1907389-52A, 1907389-53A, 1907389-54A, 1907389-55A, 1907389-56A, 1907389-57A, 1907389-58A, 1907389-59A, 1907389-60A

Sample ID **MB-92165** Batch ID: **92165** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC12_190806B** Analysis Date: **8/6/2019 4:10:19 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO C6-C10	<7.00	20.0								
TPH-DRO >C10-C28	<7.00	20.0								
TPH-ORO >C28-C35	<7.00	20.0								
T/R Hydrocarbons: C6-C35	<7.00	20.0								
Surr: Isopropylbenzene	24.2		25.00		96.6	70	130			
Surr: Octacosane	24.8		25.00		99.2	70	130			

Sample ID **LCS-92165** Batch ID: **92165** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC12_190806B** Analysis Date: **8/6/2019 4:19:17 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	222	20.0	250.0	0	88.9	75	125			
Surr: Isopropylbenzene	24.3		25.00		97.3	70	130			
Surr: Octacosane	25.0		25.00		100	70	130			

Sample ID **LCSD-92165** Batch ID: **92165** TestNo: **CWG/1005** Units: **mg/Kg**
SampType: **LCSD** Run ID: **GC12_190806B** Analysis Date: **8/6/2019 4:28:14 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	232	20.0	250.0	0	92.7	75	125	4.16	20	
Surr: Isopropylbenzene	25.3		25.00		101	70	130	0	0	
Surr: Octacosane	25.1		25.00		100	70	130	0	0	

Sample ID **1907389-41AMS** Batch ID: **92165** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC12_190806B** Analysis Date: **8/6/2019 7:12:34 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	225	25.5	318.5	0	70.5	70	119			
Surr: Isopropylbenzene	29.3		31.85		92.1	70	130			
Surr: Octacosane	31.1		31.85		97.7	70	130			

Sample ID **1907389-41AMSD** Batch ID: **92165** TestNo: **CWG/1005** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC12_190806B** Analysis Date: **8/6/2019 7:21:31 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	239	25.9	323.9	0	73.7	75	125	6.02	20	S
Surr: Isopropylbenzene	29.3		32.39		90.5	70	130	0	0	
Surr: Octacosane	31.9		32.39		98.5	70	130	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190806B

Sample ID **ICV-190806**	Batch ID: **R105613**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC12_190806B**	Analysis Date: **8/6/2019 8:34:08 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	977	20.0	1000	0	97.7	75	125			
Surr: Isopropylbenzene	52.9		50.00		106	70	130			
Surr: Octacosane	53.6		50.00		107	70	130			

Sample ID **CCV1-190806**	Batch ID: **R105613**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC12_190806B**	Analysis Date: **8/6/2019 3:59:27 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	406	20.0	500.0	0	81.1	75	125			
Surr: Isopropylbenzene	19.3		25.00		77.2	70	130			
Surr: Octacosane	20.5		25.00		82.0	70	130			

Sample ID **CCV2-190806**	Batch ID: **R105613**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC12_190806B**	Analysis Date: **8/6/2019 8:06:19 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	448	20.0	500.0	0	89.5	75	125			
Surr: Isopropylbenzene	21.3		25.00		85.2	70	130			
Surr: Octacosane	21.4		25.00		85.5	70	130			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190807A

The QC data in batch 92190 applies to the following samples: 1907389-61A

Sample ID	MB-92190	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg
SampType:	MBLK	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 7:39:33 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO C6-C10	<7.00	20.0								
TPH-DRO >C10-C28	<7.00	20.0								
TPH-ORO >C28-C35	<7.00	20.0								
T/R Hydrocarbons: C6-C35	<7.00	20.0								
Surr: Isopropylbenzene	21.2		25.00		84.8	70	130			
Surr: Octacosane	22.8		25.00		91.2	70	130			

Sample ID	LCS-92190	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg
SampType:	LCS	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 7:48:31 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	212	20.0	250.0	0	84.9	75	125			
Surr: Isopropylbenzene	24.5		25.00		97.9	70	130			
Surr: Octacosane	23.4		25.00		93.8	70	130			

Sample ID	LCSD-92190	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg
SampType:	LCSD	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 7:57:28 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	213	20.0	250.0	0	85.0	75	125	0.095	20	
Surr: Isopropylbenzene	24.7		25.00		99.0	70	130	0	0	
Surr: Octacosane	24.2		25.00		96.8	70	130	0	0	

Sample ID	1907385-03AMS	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 9:27:29 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	210	21.0	262.6	0	79.9	70	119			
Surr: Isopropylbenzene	23.6		26.26		89.9	70	130			
Surr: Octacosane	25.2		26.26		95.8	70	130			

Sample ID	1907385-03AMSD	Batch ID:	92190	TestNo:	CWG/1005	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	GC12_190807A	Analysis Date:	8/7/2019 9:36:27 AM	Prep Date:	8/6/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	231	20.3	253.4	0	91.2	75	125	9.64	20	
Surr: Isopropylbenzene	26.0		25.34		102	70	130	0	0	
Surr: Octacosane	25.3		25.34		99.7	70	130	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC12_190807A

Sample ID **ICV-190807**	Batch ID: **R105629**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC12_190807A**	Analysis Date: **8/7/2019 7:24:50 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	934	20.0	1000	0	93.4	75	125			
Surr: Isopropylbenzene	51.3		50.00		103	70	130			
Surr: Octacosane	50.8		50.00		102	70	130			

Sample ID **CCV1-190807**	Batch ID: **R105629**	TestNo: **CWG/1005**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC12_190807A**	Analysis Date: **8/7/2019 9:45:24 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
T/R Hydrocarbons: C6-C35	429	20.0	500.0	0	85.7	75	125			
Surr: Isopropylbenzene	19.8		25.00		79.2	70	130			
Surr: Octacosane	20.4		25.00		81.7	70	130			

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_190730B

The QC data in batch 92047 applies to the following samples: 1907389-15A

Sample ID	LCS-92047 MEOH	Batch ID:	92047	TestNo:	SW8260C	Units:	mg/Kg
SampType:	LCS	Run ID:	GCMS1_190730B	Analysis Date:	7/30/2019 6:41:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Xylenes	3.59	0.250	3.48	0	103	75	125			
Surr: 1,2-Dichloroethane-d4	2060		2500		82.2	52	149			
Surr: 4-Bromofluorobenzene	2420		2500		96.9	84	118			
Surr: Dibromofluoromethane	2360		2500		94.5	65	135			
Surr: Toluene-d8	2310		2500		92.4	84	116			

Sample ID	MB-92047 MEOH	Batch ID:	92047	TestNo:	SW8260C	Units:	mg/Kg
SampType:	MBLK	Run ID:	GCMS1_190730B	Analysis Date:	7/30/2019 7:12:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Xylenes	<0.0500	0.250								
Surr: 1,2-Dichloroethane-d4	2000		2500		80.2	52	149			
Surr: 4-Bromofluorobenzene	2460		2500		98.2	84	118			
Surr: Dibromofluoromethane	2330		2500		93.2	65	135			
Surr: Toluene-d8	2300		2500		91.9	84	116			

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_190730B

Sample ID	ICV-190730	Batch ID:	R105440	TestNo:	SW8260C	Units:	mg/Kg
SampType:	ICV	Run ID:	GCMS1_190730B	Analysis Date:	7/30/2019 11:59:00 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Xylenes	0.143	0.00500	0.139	0	102	80	120			
Surr: 1,2-Dichloroethane-d4	42.7		50.00		85.5	52	149			
Surr: 4-Bromofluorobenzene	52.6		50.00		105	84	118			
Surr: Dibromofluoromethane	46.8		50.00		93.7	65	135			
Surr: Toluene-d8	46.6		50.00		93.2	84	116			

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190730A

The QC data in batch 92040 applies to the following samples: 1907389-01A, 1907389-08A, 1907389-15A, 1907389-20A, 1907389-26A, 1907389-30A

Sample ID	LCS-92040	Batch ID:	92040	TestNo:	SW8260C	Units:	mg/Kg
SampType:	LCS	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 11:59:00 AM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0245	0.00500	0.0232	0	106	75	125			
Ethylbenzene	0.0225	0.00500	0.0232	0	97.0	75	125			
Toluene	0.0254	0.00500	0.0232	0	110	75	125			
Total Xylenes	0.0684	0.00500	0.0696	0	98.3	75	125			
Surr: 1,2-Dichloroethane-d4	44.8		50.00		89.5	52	149			
Surr: 4-Bromofluorobenzene	46.6		50.00		93.1	84	118			
Surr: Dibromofluoromethane	51.3		50.00		103	65	135			
Surr: Toluene-d8	45.8		50.00		91.7	84	116			

Sample ID	MB-92040	Batch ID:	92040	TestNo:	SW8260C	Units:	mg/Kg
SampType:	MBLK	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 12:55:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.00100	0.00500								
Ethylbenzene	<0.00100	0.00500								
Toluene	<0.00100	0.00500								
Total Xylenes	<0.00100	0.00500								
Surr: 1,2-Dichloroethane-d4	44.2		50.00		88.3	52	149			
Surr: 4-Bromofluorobenzene	45.6		50.00		91.3	84	118			
Surr: Dibromofluoromethane	51.3		50.00		103	65	135			
Surr: Toluene-d8	46.8		50.00		93.6	84	116			

Sample ID	1907366-01AMS	Batch ID:	92040	TestNo:	SW8260C	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 2:28:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.160	0.0334	0.155	0	103	73	126			
Ethylbenzene	0.142	0.0334	0.155	0	91.5	74	127			
Toluene	0.165	0.0334	0.155	0	106	71	127			
Total Xylenes	0.432	0.0334	0.465	0	93.0	75	125			
Surr: 1,2-Dichloroethane-d4	323		334.0		96.7	52	149			
Surr: 4-Bromofluorobenzene	308		334.0		92.1	84	118			
Surr: Dibromofluoromethane	349		334.0		104	65	135			
Surr: Toluene-d8	300		334.0		89.9	84	116			

Sample ID	1907366-01AMSD	Batch ID:	92040	TestNo:	SW8260C	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	GCMS2_190730A	Analysis Date:	7/30/2019 2:57:00 PM	Prep Date:	7/30/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.142	0.0324	0.150	0	94.6	73	126	11.6	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190730A

Sample ID **1907366-01AMSD**	Batch ID: **92040**	TestNo: **SW8260C**	Units: **mg/Kg-dry**		
SampType: **MSD**	Run ID: **GCMS2_190730A**	Analysis Date: **7/30/2019 2:57:00 PM**	Prep Date: **7/30/2019**		

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	0.133	0.0324	0.150	0	88.7	74	127	6.25	30	
Toluene	0.154	0.0324	0.150	0	103	71	127	6.65	30	
Total Xylenes	0.417	0.0324	0.451	0	92.6	75	125	3.50	30	
Surr: 1,2-Dichloroethane-d4	297		323.7		91.9	52	149	0	0	
Surr: 4-Bromofluorobenzene	294		323.7		90.8	84	118	0	0	
Surr: Dibromofluoromethane	333		323.7		103	65	135	0	0	
Surr: Toluene-d8	294		323.7		90.8	84	116	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190730A

Sample ID	**ICV-190730**	Batch ID:	**R105439**	TestNo:	**SW8260C**	Units:	**mg/Kg**
SampType:	**ICV**	Run ID:	**GCMS2_190730A**	Analysis Date:	**7/30/2019 11:18:00 AM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0474	0.00500	0.0464	0	102	80	120			
Ethylbenzene	0.0448	0.00500	0.0464	0	96.6	80	120			
Toluene	0.0495	0.00500	0.0464	0	107	80	120			
Total Xylenes	0.138	0.00500	0.139	0	99.0	80	120			
Surr: 1,2-Dichloroethane-d4	44.7		50.00		89.3	52	149			
Surr: 4-Bromofluorobenzene	45.7		50.00		91.3	84	118			
Surr: Dibromofluoromethane	50.1		50.00		100	65	135			
Surr: Toluene-d8	45.8		50.00		91.6	84	116			

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190806A

The QC data in batch 92171 applies to the following samples: 1907389-41A, 1907389-42A, 1907389-43A, 1907389-44A, 1907389-45A, 1907389-46A, 1907389-47A, 1907389-48A, 1907389-49A, 1907389-60A, 1907389-61A

Sample ID	**MB-92171**	Batch ID:	**92171**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**MBLK**	Run ID:	**IC2_190806A**	Analysis Date:	**8/6/2019 2:05:37 PM**	Prep Date:	**8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<2.00	5.00								

Sample ID	**LCS-92171**	Batch ID:	**92171**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**LCS**	Run ID:	**IC2_190806A**	Analysis Date:	**8/6/2019 2:21:37 PM**	Prep Date:	**8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	53.3	5.00	50.00	0	107	80	120			

Sample ID	**LCSD-92171**	Batch ID:	**92171**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**LCSD**	Run ID:	**IC2_190806A**	Analysis Date:	**8/6/2019 2:37:37 PM**	Prep Date:	**8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	52.8	5.00	50.00	0	106	80	120	0.925	15	

Sample ID	**1907389-46A-DUP**	Batch ID:	**92171**	TestNo:	**SW9056A**	Units:	**mg/Kg-dry**
SampType:	**DUP**	Run ID:	**IC2_190806A**	Analysis Date:	**8/6/2019 10:49:49 PM**	Prep Date:	**8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	290	58.8	0	318.0				9.28	10	

Sample ID	**1907389-46AMS**	Batch ID:	**92171**	TestNo:	**SW9056A**	Units:	**mg/Kg-dry**
SampType:	**MS**	Run ID:	**IC2_190806A**	Analysis Date:	**8/6/2019 11:05:49 PM**	Prep Date:	**8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	388	60.4	120.7	318.0	58.3	80	120			S

Sample ID	**1907389-46AMSD**	Batch ID:	**92171**	TestNo:	**SW9056A**	Units:	**mg/Kg-dry**
SampType:	**MSD**	Run ID:	**IC2_190806A**	Analysis Date:	**8/6/2019 11:21:49 PM**	Prep Date:	**8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	374	58.1	116.2	318.0	48.3	80	120	3.74	15	S

Sample ID	**1908010-02C-DUP**	Batch ID:	**92171**	TestNo:	**SW9056A**	Units:	**mg/Kg-dry**
SampType:	**DUP**	Run ID:	**IC2_190806A**	Analysis Date:	**8/7/2019 12:09:49 AM**	Prep Date:	**8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	1290	283	0	1166				10.1	10	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190806A

Sample ID	**ICV-190806**	Batch ID:	**R105601**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**ICV**	Run ID:	**IC2_190806A**	Analysis Date:	**8/6/2019 1:33:37 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	27.4	5.00	25.00	0	110	90	110			

Sample ID	**CCV1-190806**	Batch ID:	**R105601**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**CCV**	Run ID:	**IC2_190806A**	Analysis Date:	**8/6/2019 10:01:49 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.7	5.00	10.00	0	107	90	110			

Sample ID	**CCV2-190806**	Batch ID:	**R105601**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**CCV**	Run ID:	**IC2_190806A**	Analysis Date:	**8/7/2019 2:17:49 AM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.7	5.00	10.00	0	107	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC4_190805B

The QC data in batch 92139 applies to the following samples: 1907389-01A, 1907389-02A, 1907389-03A, 1907389-04A, 1907389-05A, 1907389-06A, 1907389-07A, 1907389-08A, 1907389-09A, 1907389-10A, 1907389-11A, 1907389-12A, 1907389-13A, 1907389-14A, 1907389-35A, 1907389-36A, 1907389-37A, 1907389-38A, 1907389-39A, 1907389-40A

Sample ID **MB-92139** Batch ID: **92139** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **IC4_190805B** Analysis Date: **8/5/2019 9:47:56 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<2.00	5.00								

Sample ID **LCS-92139** Batch ID: **92139** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **LCS** Run ID: **IC4_190805B** Analysis Date: **8/5/2019 10:19:56 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	47.8	5.00	50.00	0	95.6	80	120			

Sample ID **LCSD-92139** Batch ID: **92139** TestNo: **SW9056A** Units: **mg/Kg**
SampType: **LCSD** Run ID: **IC4_190805B** Analysis Date: **8/5/2019 10:35:56 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	47.6	5.00	50.00	0	95.1	80	120	0.498	15	

Sample ID **1907389-02A-DUP** Batch ID: **92139** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **DUP** Run ID: **IC4_190805B** Analysis Date: **8/5/2019 7:59:58 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	68.4	65.0	0	144.7				71.6	10	R

Sample ID **1907389-05A-DUP** Batch ID: **92139** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **DUP** Run ID: **IC4_190805B** Analysis Date: **8/5/2019 8:15:58 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	70.4	66.5	0	48.31				37.2	10	R

Sample ID **1907389-02AMS** Batch ID: **92139** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **IC4_190805B** Analysis Date: **8/5/2019 8:31:58 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	148	65.7	131.5	144.7	2.28	80	120			S

Sample ID **1907389-02AMSD** Batch ID: **92139** TestNo: **SW9056A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **IC4_190805B** Analysis Date: **8/5/2019 8:47:58 PM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	161	65.2	130.5	144.7	12.4	80	120	8.51	15	S

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC4_190805B

Sample ID	**ICV-190805**	Batch ID:	**R105580**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**ICV**	Run ID:	**IC4_190805B**	Analysis Date:	**8/5/2019 9:15:56 AM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	24.4	5.00	25.00	0	97.5	90	110			

Sample ID	**CCV1-190805**	Batch ID:	**R105580**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**CCV**	Run ID:	**IC4_190805B**	Analysis Date:	**8/5/2019 4:07:01 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.71	5.00	10.00	0	97.1	90	110			

Sample ID	**CCV2-190805**	Batch ID:	**R105580**	TestNo:	**SW9056A**	Units:	**mg/Kg**
SampType:	**CCV**	Run ID:	**IC4_190805B**	Analysis Date:	**8/5/2019 9:51:58 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.81	5.00	10.00	0	98.1	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190802A**

The QC data in batch 92135 applies to the following samples: 1907389-01A, 1907389-02A, 1907389-03A, 1907389-04A, 1907389-05A, 1907389-06A, 1907389-07A, 1907389-08A, 1907389-09A, 1907389-10A, 1907389-11A, 1907389-12A, 1907389-13A, 1907389-14A, 1907389-15A, 1907389-16A, 1907389-17A, 1907389-18A, 1907389-19A, 1907389-20A

Sample ID **1907389-20A-DUP** Batch ID: **92135** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190802A** Analysis Date: **8/5/2019 10:00:00 AM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	28.7	0	0	26.33				8.67	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190802C**

The QC data in batch 92137 applies to the following samples: 1907389-21A, 1907389-22A, 1907389-23A, 1907389-24A, 1907389-25A, 1907389-26A, 1907389-27A, 1907389-28A, 1907389-29A, 1907389-30A, 1907389-31A, 1907389-32A, 1907389-33A, 1907389-34A, 1907389-35A, 1907389-36A

Sample ID **1907389-35A-DUP** Batch ID: **92137** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190802C** Analysis Date: **8/5/2019 8:45:00 AM** Prep Date: **8/2/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	37.0	0	0	35.48				4.14	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190805B**

The QC data in batch 92169 applies to the following samples: 1907389-37A, 1907389-38A, 1907389-39A, 1907389-40A, 1907389-41A, 1907389-42A, 1907389-43A, 1907389-44A, 1907389-45A, 1907389-46A, 1907389-47A, 1907389-49A, 1907389-50A, 1907389-51A, 1907389-52A, 1907389-53A, 1907389-54A, 1907389-55A, 1907389-56A

Sample ID **1907389-56A-DUP** Batch ID: **92169** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190805B** Analysis Date: **8/6/2019 8:35:00 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	20.4	0	0	24.73				19.1	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190805C**

The QC data in batch 92170 applies to the following samples: 1907389-57A, 1907389-58A, 1907389-59A, 1907389-60A, 1907389-61A

Sample ID **1907393-13A-DUP** Batch ID: **92170** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190805C** Analysis Date: **8/6/2019 8:35:00 AM** Prep Date: **8/5/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	5.80	0	0	5.731				1.18	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907389
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190806A**

The QC data in batch 92200 applies to the following samples: 1907389-48A

Sample ID	**1907385-17A-DUP**	Batch ID:	**92200**	TestNo:	**D2216**	Units:	**WT%**
SampType:	**DUP**	Run ID:	**PMOIST_190806A**	Analysis Date:	**8/7/2019 8:40:00 AM**	Prep Date:	**8/6/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	26.6	0	0	29.05				8.95	30	

Qualifiers:	B	Analyte detected in the associated Method Blank	DF	Dilution Factor	
	J	Analyte detected between MDL and RL	MDL	Method Detection Limit	Page 22 of 22
	ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits	
	RL	Reporting Limit	S	Spike Recovery outside control limits	
	J	Analyte detected between SDL and RL	N	Parameter not NELAP certified	

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Report

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DHL Analytical
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Account
DHL1-C

Project
887733

Corrected Report

This report consists of this Table of Contents and the following pages:

Report Name	Description	Pages
887733_r00_00__TRRPcover	Ana-Lab Project P:887733 C:DHL1 TRRP Project Report Cover Page	1
887733_r02_01_ProjectSamples	Ana-Lab Project P:887733 C:DHL1 Project Sample Cross Reference t:304	5
887733_r02_03_ProjectPrep	Ana-Lab Project P:887733 C:DHL1 Project Preparation And QCgroup (Set) Listings t:304	3
887733_r03_01_ProjectHold	Ana-Lab Project P:887733 C:DHL1 Project Holding Time Compliance	4
887733_r03_03_ProjectResults	Ana-Lab Project P:887733 C:DHL1 Project Results t:304 PO: 17148	20
887733_r03_06__ProjectTRRP	Ana-Lab Project P:887733 C:DHL1 Project TRRP Results Report for Class	14
887733_r10_01_ProjectQCgroup	Ana-Lab Project P:887733 C:DHL1 Project Sample QCgroup Reference	1
887733_r10_05_ProjectQC	Ana-Lab Project P:887733 C:DHL1 Project Quality Control Groups	2
887733_r99_09_CoC__1_of_1	Ana-Lab CoC DHL1 887733_1_of_1	3
887733_SETQA_853338_853338	Ana-Lab Project P:887733 C:DHL1 Project Quality Control TRRP-13 Check Lists 853338_853338	2
887733_SETQA_855959_855959	Ana-Lab Project P:887733 C:DHL1 Project Quality Control TRRP-13 Check Lists 855959_855959	2
887733_SETQA_856045_856045	Ana-Lab Project P:887733 C:DHL1 Project Quality Control TRRP-13 Check Lists 856045_856045	2
887733_SETQA_er_853338_853338	Ana-Lab Project P:887733 C:DHL1 Project Quality Control TRRP-13 Check List Error Report 853338_853338	1
887733_SETQA_er_855959_855959	Ana-Lab Project P:887733 C:DHL1 Project Quality Control TRRP-13 Check List Error Report 855959_855959	1
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Laboratory Data Package Cover Page

887733

Corrected Report

This data package consists of:

☑ This signature page, the laboratory review checklist, and the following reportable data:

☑ R1 Field chain-of-custody documentation;

☑ R2 Sample identification cross-reference;

☑ R3 Test reports (analytical data sheets) for each environmental sample that includes:
- a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
- b) dilution factors,
- c) preparation methods,
- d) cleanup methods, and
- e) if required for the project, tentatively identified compounds (TICs).

☑ R4 Surrogate recovery data including: (R4 - R8: See QC Report)
- a) Calculated recovery (%R), and
- b) The laboratory's surrogate QC limits.

☑ R5 Test reports/summary forms for blank samples;

☑ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
- a) LCS spiking amounts,
- b) Calculated %R for each analyte, and
- c) The laboratory's LCS QC limits.

☑ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
- a) Samples associated with the MS/MSD clearly identified,
- b) MS/MSD spiking amounts,
- c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
- d) Calculated %Rs and relative percent differences (RPDs), and
- e) The laboratory's MS/MSD QC limits

☑ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
- a) the amount of analyte measured in the duplicate,
- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.

☑ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix; See Results Summary

☑ R10 Other problems or anomalies.

☑ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me 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 in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Trey Peery, MA (WP3)		Project Manager	8/29/2019
Name	Signature	Official Title	Date

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Sample Cross Reference

Report To

DHL Analytical
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Project **887733**

Corrected Report

Sample	Sample ID	Taken	Time	Received
1814298	*1907389-15*	07/25/2019	10:00:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/09/2019	856045	08/09/2019
EPA 1671	01	855959	08/28/2019	855959	08/28/2019
EPA 1671	01	853338	08/09/2019	853338	08/09/2019

Sample	Sample ID	Taken	Time	Received
1814299	*1907389-16*	07/25/2019	10:10:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/09/2019	856045	08/09/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/09/2019	853338	08/09/2019

Sample	Sample ID	Taken	Time	Received
1814300	*1907389-17*	07/25/2019	10:15:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/09/2019	856045	08/09/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/09/2019	853338	08/09/2019

Sample	Sample ID	Taken	Time	Received
1814301	*1907389-18*	07/25/2019	10:20:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/09/2019	856045	08/09/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/09/2019	853338	08/09/2019

Sample	Sample ID	Taken	Time	Received
1814302	*1907389-19*	07/25/2019	10:23:00	08/01/2019

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Sample Cross Reference

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Round Rock, TX 78664

Project **887733**

Corrected Report

Sample	Sample ID	Taken	Time	Received
1814304	*1907389-20*	07/25/2019	10:37:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/09/2019	856045	08/09/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/09/2019	853338	08/09/2019

Sample	Sample ID	Taken	Time	Received
1814305	*1907389-21*	07/25/2019	10:40:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/09/2019	856045	08/09/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/09/2019	853338	08/09/2019

Sample	Sample ID	Taken	Time	Received
1814306	*1907389-22*	07/25/2019	10:45:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814307	*1907389-23*	07/25/2019	10:50:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

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Project **887733**

Corrected Report

Sample	Sample ID	Taken	Time	Received
1814307	*1907389-23*	07/25/2019	10:50:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814308	*1907389-24*	07/25/2019	10:55:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814309	*1907389-25*	07/25/2019	12:00:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814310	*1907389-26*	07/25/2019	12:05:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814311	*1907389-27*	07/25/2019	12:09:00	08/01/2019

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Round Rock, TX 78664

Project **887733**

Corrected Report

Sample	Sample ID	Taken	Time	Received
1814312	*1907389-28*	07/25/2019	12:12:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814313	*1907389-29*	07/25/2019	12:17:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814314	*1907389-30*	07/25/2019	12:55:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814315	*1907389-31*	07/25/2019	13:00:00	08/01/2019

Bottle 01 Client supplied glass

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Project **887733**

Corrected Report

Sample	Sample ID	Taken	Time	Received
1814315	*1907389-31*	07/25/2019	13:00:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814316	*1907389-32*	07/25/2019	13:05:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814317	*1907389-33*	07/25/2019	13:15:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Sample	Sample ID	Taken	Time	Received
1814318	*1907389-34*	07/25/2019	13:20:00	08/01/2019

Bottle 01 Client supplied glass

Method	Bottle	PrepSet	Preparation	QcGroup	Analytical
EPA 8015B	01	856045	08/12/2019	856045	08/12/2019
EPA 1671	01	855959	08/29/2019	855959	08/29/2019
EPA 1671	01	853338	08/12/2019	853338	08/12/2019

Received by OCD: 4/3/2023 2:46:30 PM

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Sample Preparation

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Report To
DHL Analytical
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Project **887733**

Corrected Report

Prep Set # **853338** 08/09/2019

Analytical Set # **853338** **EPA 1671** 08/09/2019

Sample	Sample ID	Bottle
1814298	1907389-15	01
1814299	1907389-16	01
1814300	1907389-17	01
1814301	1907389-18	01
1814302	1907389-19	01
1814304	1907389-20	01
1814305	1907389-21	01
1814306	1907389-22	01
1814307	1907389-23	01
1814308	1907389-24	01
1814309	1907389-25	01
1814310	1907389-26	01
1814311	1907389-27	01
1814312	1907389-28	01
1814313	1907389-29	01
1814314	1907389-30	01
1814315	1907389-31	01
1814316	1907389-32	01
1814317	1907389-33	01
1814318	1907389-34	01

Prep Set # **855959** 08/28/2019

Analytical Set # **855959** **EPA 1671** 08/28/2019

Sample	Sample ID	Bottle
1814298	1907389-15	01
1814299	1907389-16	01
1814300	1907389-17	01
1814301	1907389-18	01
1814302	1907389-19	01
1814304	1907389-20	01
1814305	1907389-21	01

Released to Imaging: 4/3/2023 3:36:09 PM

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Sample Preparation

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Project **887733**

Corrected Report

Analytical Set # **855959** **EPA 1671** 08/29/2019

Sample	Sample ID	Bottle
1814306	1907389-22	01
1814307	1907389-23	01
1814308	1907389-24	01
1814309	1907389-25	01
1814310	1907389-26	01
1814311	1907389-27	01
1814312	1907389-28	01
1814313	1907389-29	01
1814314	1907389-30	01
1814315	1907389-31	01
1814316	1907389-32	01
1814317	1907389-33	01
1814318	1907389-34	01

Prep Set # **856045** 08/09/2019

Analytical Set # **856045** **EPA 8015B** 08/09/2019

Sample	Sample ID	Bottle
1814298	1907389-15	01
1814299	1907389-16	01
1814300	1907389-17	01
1814301	1907389-18	01
1814302	1907389-19	01
1814304	1907389-20	01
1814305	1907389-21	01
1814306	1907389-22	01
1814307	1907389-23	01
1814308	1907389-24	01
1814309	1907389-25	01
1814310	1907389-26	01
1814311	1907389-27	01
1814312	1907389-28	01
1814313	1907389-29	01
1814314	1907389-30	01
1814315	1907389-31	01

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Sample Preparation

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Project **887733**

Corrected Report

Analytical Set # **856045** **EPA 8015B** 08/12/2019

Sample	Sample ID	Bottle
1814316	1907389-32	01
1814317	1907389-33	01
1814318	1907389-34	01

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Report To

DHL Analytical
John Dupont
2300 Double Creek Dr
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Project 887733

Corrected Report

Name	Method	Taken:	Received	Analyzed	Hold	Elapsed	
	1814298	**7/25/19 10:00**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/9/19 15:43	14.00	15.00	*
N-Methyldiethanolamine	EPA 1671			8/9/19 15:43	14.00	15.00	*
Diethylamine Exp.	EPA 8015B			8/28/19 23:57	14.00	34.00	*
Diethylamine	EPA 1671			8/28/19 23:57	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/9/19 15:43	14.00	15.00	*
Monoethanolamine	EPA 8015B			8/9/19 15:43	7.00	15.00	*
	1814299	**7/25/19 10:10**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/9/19 16:01	14.00	15.00	*
N-Methyldiethanolamine	EPA 1671			8/9/19 16:01	14.00	15.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 0:20	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 0:20	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/9/19 16:01	14.00	15.00	*
Monoethanolamine	EPA 8015B			8/9/19 16:01	7.00	15.00	*
	1814300	**7/25/19 10:15**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/9/19 16:20	14.00	15.00	*
N-Methyldiethanolamine	EPA 1671			8/9/19 16:20	14.00	15.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 0:44	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 0:44	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/9/19 16:20	14.00	15.00	*
Monoethanolamine	EPA 8015B			8/9/19 16:20	7.00	15.00	*
	1814301	**7/25/19 10:20**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/9/19 16:38	14.00	15.00	*
N-Methyldiethanolamine	EPA 1671			8/9/19 16:38	14.00	15.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 1:07	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 1:07	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/9/19 16:38	14.00	15.00	*
Monoethanolamine	EPA 8015B			8/9/19 16:38	7.00	15.00	*
	1814302	**7/25/19 10:23**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/9/19 16:56	14.00	15.00	*
N-Methyldiethanolamine	EPA 1671			8/9/19 16:56	14.00	15.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 1:30	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 1:30	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/9/19 16:56	14.00	15.00	*
Monoethanolamine	EPA 8015B			8/9/19 16:56	7.00	15.00	*

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Report To

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John Dupont
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Project 887733

Corrected Report

Name	Method	Taken:	Received	Analyzed	Hold	Elapsed	
	1814304	**7/25/19 10:37**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/9/19 17:14	14.00	15.00	*
N-Methyldiethanolamine	EPA 1671			8/9/19 17:14	14.00	15.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 1:54	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 1:54	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/9/19 17:14	14.00	15.00	*
Monoethanolamine	EPA 8015B			8/9/19 17:14	7.00	15.00	*
	1814305	**7/25/19 10:40**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 8:47	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 8:47	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 2:17	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 2:17	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 8:47	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 8:47	7.00	17.00	*
	1814306	**7/25/19 10:45**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 9:05	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 9:05	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 2:41	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 2:41	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 9:05	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 9:05	7.00	17.00	*
	1814307	**7/25/19 10:50**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 9:23	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 9:23	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 3:04	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 3:04	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 9:23	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 9:23	7.00	17.00	*
	1814308	**7/25/19 10:55**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 9:59	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 9:59	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 3:27	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 3:27	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 9:59	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 9:59	7.00	17.00	*

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Round Rock, TX 78664

Project 887733

Corrected Report

Name	Method	Taken:	Received	Analyzed	Hold	Elapsed	
	1814309	**7/25/19 12:00**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 10:17	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 10:17	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 4:14	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 4:14	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 10:17	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 10:17	7.00	17.00	*
	1814310	**7/25/19 12:05**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 10:35	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 10:35	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 4:37	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 4:37	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 10:35	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 10:35	7.00	17.00	*
	1814311	**7/25/19 12:09**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 10:53	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 10:53	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 5:00	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 5:00	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 10:53	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 10:53	7.00	17.00	*
	1814312	**7/25/19 12:12**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 11:11	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 11:11	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 5:24	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 5:24	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 11:11	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 11:11	7.00	17.00	*
	1814313	**7/25/19 12:17**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 11:29	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 11:29	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 8:34	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 8:34	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 11:29	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 11:29	7.00	17.00	*

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Project 887733

Corrected Report

Name	Method	Taken:	Received	Analyzed	Hold	Elapsed	
	1814314	**7/25/19 12:55**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 11:47	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 11:47	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 8:57	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 8:57	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 11:47	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 11:47	7.00	17.00	*
	1814315	**7/25/19 13:00**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 12:05	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 12:05	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 9:21	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 9:21	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 12:05	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 12:05	7.00	17.00	*
	1814316	**7/25/19 13:05**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 12:23	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 12:23	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 9:44	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 9:44	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 12:23	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 12:23	7.00	17.00	*
	1814317	**7/25/19 13:15**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 12:41	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 12:41	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 10:08	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 10:08	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 12:41	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 12:41	7.00	17.00	*
	1814318	**7/25/19 13:20**	08/01/2019				
N-Methyldiethanolamine EXp.	EPA 1671			8/12/19 12:59	14.00	17.00	*
N-Methyldiethanolamine	EPA 1671			8/12/19 12:59	14.00	17.00	*
Diethylamine Exp.	EPA 8015B			8/29/19 10:32	14.00	34.00	*
Diethylamine	EPA 1671			8/29/19 10:32	14.00	34.00	*
Monoethanolamine Exp.	EPA 8015B			8/12/19 12:59	14.00	17.00	*
Monoethanolamine	EPA 8015B			8/12/19 12:59	7.00	17.00	*

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Results

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887733

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Report To

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Round Rock, TX 78664

Results

1814298 **1907389-15** Received: 08/01/2019

Solid & Chemical Materials Collected by: Client DHL Analytical PO: 17148
Taken: 07/25/2019 10:00:00

Supplement to Test Report 1811073
Supplement to Test Report 1806023

EPA 1671 Prepared: 853338 08/09/2019 15:43:00 Analyzed 853338 08/09/2019 15:43:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXPD	**105-59-9**	01

EPA 1671 Prepared: 855959 08/28/2019 23:57:00 Analyzed 855959 08/28/2019 23:57:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B Prepared: 856045 08/09/2019 15:43:00 Analyzed 856045 08/09/2019 15:43:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814299 **1907389-16** Received: 08/01/2019

Solid & Chemical Materials Collected by: Client DHL Analytical PO: 17148
Taken: 07/25/2019 10:10:00

Supplement to Test Report 1811074
Supplement to Test Report 1806024

EPA 1671 Prepared: 853338 08/09/2019 16:01:00 Analyzed 853338 08/09/2019 16:01:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 Prepared: 855959 08/29/2019 00:20:00 Analyzed 855959 08/29/2019 00:20:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B Prepared: 856045 08/09/2019 16:01:00 Analyzed 856045 08/09/2019 16:01:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

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Results

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1814300 **1907389-17** Received: 08/01/2019

Solid & Chemical Materials | Collected by: Client | DHL Analytical | PO: 17148
Taken: 07/25/2019 10:15:00

Supplement to Test Report 1811075
Supplement to Test Report 1806025

EPA 1671 Prepared: 853338 08/09/2019 16:20:00 Analyzed 853338 08/09/2019 16:20:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 Prepared: 855959 08/29/2019 00:44:00 Analyzed 855959 08/29/2019 00:44:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B Prepared: 856045 08/09/2019 16:20:00 Analyzed 856045 08/09/2019 16:20:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814301 **1907389-18** Received: 08/01/2019

Solid & Chemical Materials | Collected by: Client | DHL Analytical | PO: 17148
Taken: 07/25/2019 10:20:00

Supplement to Test Report 1811076
Supplement to Test Report 1806026

EPA 1671 Prepared: 853338 08/09/2019 16:38:00 Analyzed 853338 08/09/2019 16:38:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 Prepared: 855959 08/29/2019 01:07:00 Analyzed 855959 08/29/2019 01:07:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B Prepared: 856045 08/09/2019 16:38:00 Analyzed 856045 08/09/2019 16:38:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814302 **1907389-19** Received: 08/01/2019

Solid & Chemical Materials | Collected by: Client | DHL Analytical | PO: 17148
Taken: 07/25/2019 10:23:00

Supplement to Test Report 1811077
Supplement to Test Report 1806027

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1814302 **1907389-19** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 10:23:00

Supplement to Test Report 1811077
Supplement to Test Report 1806027

EPA 1671 *Prepared:* 853338 08/09/2019 16:56:00 *Analyzed* 853338 08/09/2019 16:56:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 01:30:00 *Analyzed* 855959 08/29/2019 01:30:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/09/2019 16:56:00 *Analyzed* 856045 08/09/2019 16:56:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814304 **1907389-20** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 10:37:00

Supplement to Test Report 1811078
Supplement to Test Report 1806028

EPA 1671 *Prepared:* 853338 08/09/2019 17:14:00 *Analyzed* 853338 08/09/2019 17:14:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 01:54:00 *Analyzed* 855959 08/29/2019 01:54:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/09/2019 17:14:00 *Analyzed* 856045 08/09/2019 17:14:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814305 **1907389-21** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 10:40:00

Supplement to Test Report 1811079
Supplement to Test Report 1806029

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1814305 **1907389-21** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 10:40:00

Supplement to Test Report 1811079
Supplement to Test Report 1806029

EPA 1671 *Prepared:* 853338 08/12/2019 08:47:00 *Analyzed* 853338 08/12/2019 08:47:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 02:17:00 *Analyzed* 855959 08/29/2019 02:17:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 08:47:00 *Analyzed* 856045 08/12/2019 08:47:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814306 **1907389-22** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 10:45:00

Supplement to Test Report 1811080
Supplement to Test Report 1806030

EPA 1671 *Prepared:* 853338 08/12/2019 09:05:00 *Analyzed* 853338 08/12/2019 09:05:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 02:41:00 *Analyzed* 855959 08/29/2019 02:41:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 09:05:00 *Analyzed* 856045 08/12/2019 09:05:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814307 **1907389-23** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 10:50:00

Supplement to Test Report 1811081
Supplement to Test Report 1806031

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1814307 **1907389-23** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 10:50:00

Supplement to Test Report 1811081
Supplement to Test Report 1806031

EPA 1671 *Prepared:* 853338 08/12/2019 09:23:00 *Analyzed* 853338 08/12/2019 09:23:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 03:04:00 *Analyzed* 855959 08/29/2019 03:04:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 09:23:00 *Analyzed* 856045 08/12/2019 09:23:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814308 **1907389-24** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 10:55:00

Supplement to Test Report 1811082
Supplement to Test Report 1806032

EPA 1671 *Prepared:* 853338 08/12/2019 09:59:00 *Analyzed* 853338 08/12/2019 09:59:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 03:27:00 *Analyzed* 855959 08/29/2019 03:27:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 09:59:00 *Analyzed* 856045 08/12/2019 09:59:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814309 **1907389-25** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:00:00

Supplement to Test Report 1811083
Supplement to Test Report 1806033

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1814309 **1907389-25** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:00:00

Supplement to Test Report 1811083
Supplement to Test Report 1806033

EPA 1671 *Prepared:* 853338 08/12/2019 10:17:00 *Analyzed* 853338 08/12/2019 10:17:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 04:14:00 *Analyzed* 855959 08/29/2019 04:14:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 10:17:00 *Analyzed* 856045 08/12/2019 10:17:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814310 **1907389-26** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:05:00

Supplement to Test Report 1811084
Supplement to Test Report 1806034

EPA 1671 *Prepared:* 853338 08/12/2019 10:35:00 *Analyzed* 853338 08/12/2019 10:35:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 04:37:00 *Analyzed* 855959 08/29/2019 04:37:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 10:35:00 *Analyzed* 856045 08/12/2019 10:35:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814311 **1907389-27** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:09:00

Supplement to Test Report 1811085
Supplement to Test Report 1806035

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1814311 **1907389-27** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:09:00

Supplement to Test Report 1811085
Supplement to Test Report 1806035

EPA 1671 *Prepared:* 853338 08/12/2019 10:53:00 *Analyzed* 853338 08/12/2019 10:53:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 05:00:00 *Analyzed* 855959 08/29/2019 05:00:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 10:53:00 *Analyzed* 856045 08/12/2019 10:53:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814312 **1907389-28** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:12:00

Supplement to Test Report 1811086
Supplement to Test Report 1806036

EPA 1671 *Prepared:* 853338 08/12/2019 11:11:00 *Analyzed* 853338 08/12/2019 11:11:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 05:24:00 *Analyzed* 855959 08/29/2019 05:24:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 11:11:00 *Analyzed* 856045 08/12/2019 11:11:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814313 **1907389-29** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:17:00

Supplement to Test Report 1811087
Supplement to Test Report 1806037

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1814313 **1907389-29** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:17:00

Supplement to Test Report 1811087
Supplement to Test Report 1806037

EPA 1671 *Prepared:* 853338 08/12/2019 11:29:00 *Analyzed* 853338 08/12/2019 11:29:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 08:34:00 *Analyzed* 855959 08/29/2019 08:34:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 11:29:00 *Analyzed* 856045 08/12/2019 11:29:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814314 **1907389-30** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 12:55:00

Supplement to Test Report 1811088
Supplement to Test Report 1806038

EPA 1671 *Prepared:* 853338 08/12/2019 11:47:00 *Analyzed* 853338 08/12/2019 11:47:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 08:57:00 *Analyzed* 855959 08/29/2019 08:57:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 11:47:00 *Analyzed* 856045 08/12/2019 11:47:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814315 **1907389-31** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 13:00:00

Supplement to Test Report 1811089
Supplement to Test Report 1806039

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1814315 **1907389-31** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 13:00:00

Supplement to Test Report 1811089
Supplement to Test Report 1806039

EPA 1671 *Prepared:* 853338 08/12/2019 12:05:00 *Analyzed* 853338 08/12/2019 12:05:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 09:21:00 *Analyzed* 855959 08/29/2019 09:21:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 12:05:00 *Analyzed* 856045 08/12/2019 12:05:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814316 **1907389-32** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 13:05:00

Supplement to Test Report 1811090
Supplement to Test Report 1806040

EPA 1671 *Prepared:* 853338 08/12/2019 12:23:00 *Analyzed* 853338 08/12/2019 12:23:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 09:44:00 *Analyzed* 855959 08/29/2019 09:44:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 12:23:00 *Analyzed* 856045 08/12/2019 12:23:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814317 **1907389-33** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 13:15:00

Supplement to Test Report 1811091
Supplement to Test Report 1806041

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1814317 **1907389-33** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 13:15:00

Supplement to Test Report 1811091
Supplement to Test Report 1806041

EPA 1671 *Prepared:* 853338 08/12/2019 12:41:00 *Analyzed* 853338 08/12/2019 12:41:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 10:08:00 *Analyzed* 855959 08/29/2019 10:08:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	H	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 12:41:00 *Analyzed* 856045 08/12/2019 12:41:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

1814318 **1907389-34** *Received:* 08/01/2019

Solid & Chemical Materials *Collected by:* Client DHL Analytical *PO:* 17148
Taken: 07/25/2019 13:20:00

Supplement to Test Report 1811092
Supplement to Test Report 1806042

EPA 1671 *Prepared:* 853338 08/12/2019 12:59:00 *Analyzed* 853338 08/12/2019 12:59:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**N-Methyldiethanolamine**	**<25.0**	**mg/kg**	25.0	HXD	**105-59-9**	01

EPA 1671 *Prepared:* 855959 08/29/2019 10:32:00 *Analyzed* 855959 08/29/2019 10:32:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Diethylamine**	**<500**	**mg/kg**	500	HP	**109-89-7**	01

EPA 8015B *Prepared:* 856045 08/12/2019 12:59:00 *Analyzed* 856045 08/12/2019 12:59:00 EMT

	Parameter	Results	Units	RL	Flag	CAS	Bottle
z	**Monoethanolamine**	**<50.0**	**mg/kg**	50.0	HD	**141-43-5**	01

Sample Preparation

1814298 **1907389-15** *Received:* 08/01/2019

17148

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1814298 **1907389-15** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/09/2019*	*15:43:00*	*Analyzed*	*853338*	*08/09/2019*	*15:43:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	
EPA 8015B	*Prepared:*	*855959*	*08/28/2019*	*23:57:00*	*Analyzed*	*855959*	*08/28/2019*	*23:57:00*	*EMT*
Diethylamine Exp.	**Entered**							01	
EPA 8015B	*Prepared:*	*856045*	*08/09/2019*	*15:43:00*	*Analyzed*	*856045*	*08/09/2019*	*15:43:00*	*EMT*
z **Monoethanolamine Exp.**	**Entered**						**141-43-5**	01	

1814299 **1907389-16** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/09/2019*	*16:01:00*	*Analyzed*	*853338*	*08/09/2019*	*16:01:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*00:20:00*	*Analyzed*	*855959*	*08/29/2019*	*00:20:00*	*EMT*
Diethylamine Exp.	**Entered**							01	
EPA 8015B	*Prepared:*	*856045*	*08/09/2019*	*16:01:00*	*Analyzed*	*856045*	*08/09/2019*	*16:01:00*	*EMT*
z **Monoethanolamine Exp.**	**Entered**						**141-43-5**	01	

1814300 **1907389-17** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/09/2019*	*16:20:00*	*Analyzed*	*853338*	*08/09/2019*	*16:20:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	

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1814300 **1907389-17** *Received:* 08/01/2019

17148

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*00:44:00*	*Analyzed*	*855959*	*08/29/2019*	*00:44:00*	*EMT*

Diethylamine Exp. **Entered** 01

EPA 8015B	*Prepared:*	*856045*	*08/09/2019*	*16:20:00*	*Analyzed*	*856045*	*08/09/2019*	*16:20:00*	*EMT*

z **Monoethanolamine Exp.** **Entered** **141-43-5** 01

1814301 **1907389-18** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/09/2019*	*16:38:00*	*Analyzed*	*853338*	*08/09/2019*	*16:38:00*	*EMT*

z **N-Methyldiethanolamine EXp.** **Entered** **105-59-9** 01

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*01:07:00*	*Analyzed*	*855959*	*08/29/2019*	*01:07:00*	*EMT*

Diethylamine Exp. **Entered** 01

EPA 8015B	*Prepared:*	*856045*	*08/09/2019*	*16:38:00*	*Analyzed*	*856045*	*08/09/2019*	*16:38:00*	*EMT*

z **Monoethanolamine Exp.** **Entered** **141-43-5** 01

1814302 **1907389-19** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/09/2019*	*16:56:00*	*Analyzed*	*853338*	*08/09/2019*	*16:56:00*	*EMT*

z **N-Methyldiethanolamine EXp.** **Entered** **105-59-9** 01

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*01:30:00*	*Analyzed*	*855959*	*08/29/2019*	*01:30:00*	*EMT*

Diethylamine Exp. **Entered** 01

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1814302 **1907389-19** *Received:* 08/01/2019

17148

EPA 8015B	*Prepared:*	*856045*	*08/09/2019*	*16:56:00*	*Analyzed*	*856045*	*08/09/2019*	*16:56:00*	*EMT*

z	**Monoethanolamine Exp.**	**Entered**	**141-43-5**	01

1814304 **1907389-20** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/09/2019*	*17:14:00*	*Analyzed*	*853338*	*08/09/2019*	*17:14:00*	*EMT*

z	**N-Methyldiethanolamine EXp.**	**Entered**	**105-59-9**	01

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*01:54:00*	*Analyzed*	*855959*	*08/29/2019*	*01:54:00*	*EMT*

	Diethylamine Exp.	**Entered**		01

EPA 8015B	*Prepared:*	*856045*	*08/09/2019*	*17:14:00*	*Analyzed*	*856045*	*08/09/2019*	*17:14:00*	*EMT*

z	**Monoethanolamine Exp.**	**Entered**	**141-43-5**	01

1814305 **1907389-21** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*08:47:00*	*Analyzed*	*853338*	*08/12/2019*	*08:47:00*	*EMT*

z	**N-Methyldiethanolamine EXp.**	**Entered**	**105-59-9**	01

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*02:17:00*	*Analyzed*	*855959*	*08/29/2019*	*02:17:00*	*EMT*

	Diethylamine Exp.	**Entered**		01

EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*08:47:00*	*Analyzed*	*856045*	*08/12/2019*	*08:47:00*	*EMT*

z	**Monoethanolamine Exp.**	**Entered**	**141-43-5**	01

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1814306 **1907389-22** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*09:05:00*	*Analyzed*	*853338*	*08/12/2019*	*09:05:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*02:41:00*	*Analyzed*	*855959*	*08/29/2019*	*02:41:00*	*EMT*
Diethylamine Exp.	**Entered**							01	
EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*09:05:00*	*Analyzed*	*856045*	*08/12/2019*	*09:05:00*	*EMT*
z **Monoethanolamine Exp.**	**Entered**						**141-43-5**	01	

1814307 **1907389-23** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*09:23:00*	*Analyzed*	*853338*	*08/12/2019*	*09:23:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*03:04:00*	*Analyzed*	*855959*	*08/29/2019*	*03:04:00*	*EMT*
Diethylamine Exp.	**Entered**							01	
EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*09:23:00*	*Analyzed*	*856045*	*08/12/2019*	*09:23:00*	*EMT*
z **Monoethanolamine Exp.**	**Entered**						**141-43-5**	01	

1814308 **1907389-24** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*09:59:00*	*Analyzed*	*853338*	*08/12/2019*	*09:59:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	

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1814308 **1907389-24** *Received:* 08/01/2019

17148

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*03:27:00*	*Analyzed*	*855959*	*08/29/2019*	*03:27:00*	*EMT*	
Diethylamine Exp.	**Entered**									01
EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*09:59:00*	*Analyzed*	*856045*	*08/12/2019*	*09:59:00*	*EMT*	
z **Monoethanolamine Exp.**	**Entered**							**141-43-5**		01

1814309 **1907389-25** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*10:17:00*	*Analyzed*	*853338*	*08/12/2019*	*10:17:00*	*EMT*	
z **N-Methyldiethanolamine EXp.**	**Entered**							**105-59-9**		01
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*04:14:00*	*Analyzed*	*855959*	*08/29/2019*	*04:14:00*	*EMT*	
Diethylamine Exp.	**Entered**									01
EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*10:17:00*	*Analyzed*	*856045*	*08/12/2019*	*10:17:00*	*EMT*	
z **Monoethanolamine Exp.**	**Entered**							**141-43-5**		01

1814310 **1907389-26** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*10:35:00*	*Analyzed*	*853338*	*08/12/2019*	*10:35:00*	*EMT*	
z **N-Methyldiethanolamine EXp.**	**Entered**							**105-59-9**		01
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*04:37:00*	*Analyzed*	*855959*	*08/29/2019*	*04:37:00*	*EMT*	
Diethylamine Exp.	**Entered**									01

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1814310 **1907389-26** *Received:* 08/01/2019

17148

EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*10:35:00*	*Analyzed*	*856045*	*08/12/2019*	*10:35:00*	*EMT*

z **Monoethanolamine Exp.** **Entered** **141-43-5** 01

1814311 **1907389-27** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*10:53:00*	*Analyzed*	*853338*	*08/12/2019*	*10:53:00*	*EMT*

z **N-Methyldiethanolamine EXp.** **Entered** **105-59-9** 01

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*05:00:00*	*Analyzed*	*855959*	*08/29/2019*	*05:00:00*	*EMT*

Diethylamine Exp. **Entered** 01

EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*10:53:00*	*Analyzed*	*856045*	*08/12/2019*	*10:53:00*	*EMT*

z **Monoethanolamine Exp.** **Entered** **141-43-5** 01

1814312 **1907389-28** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*11:11:00*	*Analyzed*	*853338*	*08/12/2019*	*11:11:00*	*EMT*

z **N-Methyldiethanolamine EXp.** **Entered** **105-59-9** 01

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*05:24:00*	*Analyzed*	*855959*	*08/29/2019*	*05:24:00*	*EMT*

Diethylamine Exp. **Entered** 01

EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*11:11:00*	*Analyzed*	*856045*	*08/12/2019*	*11:11:00*	*EMT*

z **Monoethanolamine Exp.** **Entered** **141-43-5** 01

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1814313 **1907389-29** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*11:29:00*	*Analyzed*	*853338*	*08/12/2019*	*11:29:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*08:34:00*	*Analyzed*	*855959*	*08/29/2019*	*08:34:00*	*EMT*
Diethylamine Exp.	**Entered**							01	
EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*11:29:00*	*Analyzed*	*856045*	*08/12/2019*	*11:29:00*	*EMT*
z **Monoethanolamine Exp.**	**Entered**						**141-43-5**	01	

1814314 **1907389-30** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*11:47:00*	*Analyzed*	*853338*	*08/12/2019*	*11:47:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*08:57:00*	*Analyzed*	*855959*	*08/29/2019*	*08:57:00*	*EMT*
Diethylamine Exp.	**Entered**							01	
EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*11:47:00*	*Analyzed*	*856045*	*08/12/2019*	*11:47:00*	*EMT*
z **Monoethanolamine Exp.**	**Entered**						**141-43-5**	01	

1814315 **1907389-31** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*12:05:00*	*Analyzed*	*853338*	*08/12/2019*	*12:05:00*	*EMT*
z **N-Methyldiethanolamine EXp.**	**Entered**						**105-59-9**	01	

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1814315 **1907389-31** *Received:* 08/01/2019

17148

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*09:21:00*	*Analyzed*	*855959*	*08/29/2019*	*09:21:00*	*EMT*	
Diethylamine Exp.	**Entered**									01
EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*12:05:00*	*Analyzed*	*856045*	*08/12/2019*	*12:05:00*	*EMT*	
z **Monoethanolamine Exp.**	**Entered**							**141-43-5**		01

1814316 **1907389-32** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*12:23:00*	*Analyzed*	*853338*	*08/12/2019*	*12:23:00*	*EMT*	
z **N-Methyldiethanolamine EXp.**	**Entered**							**105-59-9**		01
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*09:44:00*	*Analyzed*	*855959*	*08/29/2019*	*09:44:00*	*EMT*	
Diethylamine Exp.	**Entered**									01
EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*12:23:00*	*Analyzed*	*856045*	*08/12/2019*	*12:23:00*	*EMT*	
z **Monoethanolamine Exp.**	**Entered**							**141-43-5**		01

1814317 **1907389-33** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*12:41:00*	*Analyzed*	*853338*	*08/12/2019*	*12:41:00*	*EMT*	
z **N-Methyldiethanolamine EXp.**	**Entered**							**105-59-9**		01
EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*10:08:00*	*Analyzed*	*855959*	*08/29/2019*	*10:08:00*	*EMT*	
Diethylamine Exp.	**Entered**									01

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1814317 **1907389-33** *Received:* 08/01/2019

17148

EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*12:41:00*	*Analyzed*	*856045*	*08/12/2019*	*12:41:00*	*EMT*

z	**Monoethanolamine Exp.**	**Entered**	**141-43-5**	01

1814318 **1907389-34** *Received:* 08/01/2019

17148

EPA 1671	*Prepared:*	*853338*	*08/12/2019*	*12:59:00*	*Analyzed*	*853338*	*08/12/2019*	*12:59:00*	*EMT*

z	**N-Methyldiethanolamine EXp.**	**Entered**	**105-59-9**	01

EPA 8015B	*Prepared:*	*855959*	*08/29/2019*	*10:32:00*	*Analyzed*	*855959*	*08/29/2019*	*10:32:00*	*EMT*

	Diethylamine Exp.	**Entered**		01

EPA 8015B	*Prepared:*	*856045*	*08/12/2019*	*12:59:00*	*Analyzed*	*856045*	*08/12/2019*	*12:59:00*	*EMT*

z	**Monoethanolamine Exp.**	**Entered**	**141-43-5**	01

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Qualifiers:

D - Duplicate RPD was higher than expected
H - Sample started outside recommended holding time
P - Spike recovery outside control limits due to matrix effects.
X - Standard reads higher than desired.

We report results on an As Received or wet basis unless marked Dry Weight. Unless otherwise noted, testing was performed at Ana-labs corporate laboratory that holds the following Federal and State certificates: EPA Lab Number TX00063, US Department of Agriculture Soil Import Permit P330-17-00117, Texas Commission on Environmental Quality Commercial Drinking Water Lab Approval (Lab ID: TX219), Texas Commission on Environmental Quality NELAP T104704201-19-15, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) Certificate No LA026, Oklahoma Department of Environmental Quality TNI Laboratory Accreditation Program Certificate No. 2018-126, Arkansas Department of Environmental Quality Certification #18-068-0. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation.
These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.
RL is the Reporting Limit (sample specific quantitation limit) and is at or above the Method Detection Limit (MDL). CAS is Chemical Abstract Service number. RL is our Reporting Limit, or Minimum Quantitation Level. The RL takes into account the Instrument Detection Limit (IDL), Method Detection Limit (MDL), and Practical Quantitation Limit (PQL), and any dilutions and/or concentrations performed during sample preparation (EQL). Our analytical result must be above this RL before we report a value in the 'Results' column of our report (without a 'J' flag). Otherwise, we report ND (Not Detected above RL), because the result is "<" (less than) the number in the RL column. MAL is Minimum Analytical Level and is typically from regulatory agencies. Unless we report a result in the result column, or interferences prevent it, we work to have our RL at or below the MAL.

Trey Peery, MA, Project Manager

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Results Summary

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Project **887733**

Report To

DHL Analytical
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Corrected Report

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**								**EPA 1671**		
1814298	**1907389-15**										
		Collection:	07/25/2019		10:00:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811073											
	Prepared: **853338**										
				Analyzed:	**853338**		8/9/19	15:43:00			
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXPD	**mg/kg**		01	1.00
	Prepared: **855959**										
				Analyzed:	**855959**		8/28/19	23:57:00			
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814299	**1907389-16**										
		Collection:	07/25/2019		10:10:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811074											
	Prepared: **853338**										
				Analyzed:	**853338**		8/9/19	16:01:00			
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: **855959**										
				Analyzed:	**855959**		8/29/19	00:20:00			
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814300	**1907389-17**										
		Collection:	07/25/2019		10:15:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811075											
	Prepared: **853338**										
				Analyzed:	**853338**		8/9/19	16:20:00			
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00

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John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Corrected Report

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**								**EPA 1671**		
	Prepared: **855959**										
				Analyzed:	**855959**			8/29/19	00:44:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814301	**1907389-18**										
		Collection:	07/25/2019	10:20:00	Client				*Received:*	08/01/2019	
Supplement to Test Report 1811076											
	Prepared: **853338**										
				Analyzed:	**853338**			8/9/19	16:38:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: **855959**										
				Analyzed:	**855959**			8/29/19	01:07:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814302	**1907389-19**										
		Collection:	07/25/2019	10:23:00	Client				*Received:*	08/01/2019	
Supplement to Test Report 1811077											
	Prepared: **853338**										
				Analyzed:	**853338**			8/9/19	16:56:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: **855959**										
				Analyzed:	**855959**			8/29/19	01:30:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814304	**1907389-20**										
		Collection:	07/25/2019	10:37:00	Client				*Received:*	08/01/2019	

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**					**EPA 1671**					
Supplement to Test Report 1811078											
Prepared:	**853338**										
				Analyzed:		**853338**		8/9/19	17:14:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared:	**855959**										
				Analyzed:		**855959**		8/29/19	01:54:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814305	**1907389-21**										
		Collection:	07/25/2019		10:40:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811079											
Prepared:	**853338**										
				Analyzed:		**853338**		8/12/19	08:47:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared:	**855959**										
				Analyzed:		**855959**		8/29/19	02:17:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814306	**1907389-22**										
		Collection:	07/25/2019		10:45:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811080											
Prepared:	**853338**										
				Analyzed:		**853338**		8/12/19	09:05:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared:	**855959**										
				Analyzed:		**855959**		8/29/19	02:41:00		

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**					**EPA 1671**					
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814307	**1907389-23**										
		Collection:	07/25/2019		10:50:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811081											
Prepared:	***853338***										
				Analyzed:	***853338***		8/12/19	09:23:00			
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared:	***855959***										
				Analyzed:	***855959***		8/29/19	03:04:00			
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814308	**1907389-24**										
		Collection:	07/25/2019		10:55:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811082											
Prepared:	***853338***										
				Analyzed:	***853338***		8/12/19	09:59:00			
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared:	***855959***										
				Analyzed:	***855959***		8/29/19	03:27:00			
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814309	**1907389-25**										
		Collection:	07/25/2019		12:00:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811083											
Prepared:	***853338***										

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**					**EPA 1671**					
				Analyzed:		***853338***		8/12/19	10:17:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: ***855959***										
				Analyzed:		***855959***		8/29/19	04:14:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814310	**1907389-26**										
		Collection:	07/25/2019	12:05:00	Client			*Received:*	08/01/2019		
Supplement to Test Report 1811084											
	Prepared: ***853338***										
				Analyzed:		***853338***		8/12/19	10:35:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: ***855959***										
				Analyzed:		***855959***		8/29/19	04:37:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814311	**1907389-27**										
		Collection:	07/25/2019	12:09:00	Client			*Received:*	08/01/2019		
Supplement to Test Report 1811085											
	Prepared: ***853338***										
				Analyzed:		***853338***		8/12/19	10:53:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: ***855959***										
				Analyzed:		***855959***		8/29/19	05:00:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814312	**1907389-28**										

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**					**EPA 1671**					
		Collection:	07/25/2019		12:12:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811086											
	Prepared: **853338**										
				Analyzed:	**853338**		8/12/19		11:11:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: **855959**										
				Analyzed:	**855959**		8/29/19		05:24:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814313	**1907389-29**										
		Collection:	07/25/2019		12:17:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811087											
	Prepared: **853338**										
				Analyzed:	**853338**		8/12/19		11:29:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: **855959**										
				Analyzed:	**855959**		8/29/19		08:34:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814314	**1907389-30**										
		Collection:	07/25/2019		12:55:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811088											
	Prepared: **853338**										
				Analyzed:	**853338**		8/12/19		11:47:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
	Prepared: **855959**										

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**								**EPA 1671**		
				Analyzed:		***855959***		8/29/19	08:57:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814315	**1907389-31**										
		Collection:	07/25/2019		13:00:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811089											
Prepared:	***853338***										
				Analyzed:		***853338***		8/12/19	12:05:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared:	***855959***										
				Analyzed:		***855959***		8/29/19	09:21:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814316	**1907389-32**										
		Collection:	07/25/2019		13:05:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811090											
Prepared:	***853338***										
				Analyzed:		***853338***		8/12/19	12:23:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared:	***855959***										
				Analyzed:		***855959***		8/29/19	09:44:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814317	**1907389-33**										
		Collection:	07/25/2019		13:15:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811091											

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**									**EPA 1671**	
Prepared: 853338											
				Analyzed:	853338			8/12/19	12:41:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared: 855959											
				Analyzed:	855959			8/29/19	10:08:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	H	**mg/kg**		01	1.00
1814318	**1907389-34**										
		Collection:	07/25/2019		13:20:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811092											
Prepared: 853338											
				Analyzed:	853338			8/12/19	12:59:00		
105-59-9	**N-Methyldiethanolamine**	**ND**	25.0	25.0	25.0	25.0	HXD	**mg/kg**		01	1.00
Prepared: 855959											
				Analyzed:	855959			8/29/19	10:32:00		
109-89-7	**Diethylamine**	**ND**	500	500	500	500	HP	**mg/kg**		01	1.00
Solid & Chemical Materials	**Organics**									**EPA 8015B**	
1814298	**1907389-15**										
		Collection:	07/25/2019		10:00:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811073											
Prepared: 856045											
				Analyzed:	856045			8/9/19	15:43:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814299	**1907389-16**										

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**					**EPA 8015B**					
		Collection:	07/25/2019		10:10:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811074											
Prepared:	**856045**										
				Analyzed:		**856045**		8/9/19	16:01:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814300	**1907389-17**										
		Collection:	07/25/2019		10:15:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811075											
Prepared:	**856045**										
				Analyzed:		**856045**		8/9/19	16:20:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814301	**1907389-18**										
		Collection:	07/25/2019		10:20:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811076											
Prepared:	**856045**										
				Analyzed:		**856045**		8/9/19	16:38:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814302	**1907389-19**										
		Collection:	07/25/2019		10:23:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811077											
Prepared:	**856045**										
				Analyzed:		**856045**		8/9/19	16:56:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**								**EPA 8015B**		
1814304	**1907389-20**										
		Collection:	07/25/2019		10:37:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811078											
	Prepared: **856045**			*Analyzed:*	**856045**	8/9/19	17:14:00				
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814305	**1907389-21**										
		Collection:	07/25/2019		10:40:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811079											
	Prepared: **856045**			*Analyzed:*	**856045**	8/12/19	08:47:00				
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814306	**1907389-22**										
		Collection:	07/25/2019		10:45:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811080											
	Prepared: **856045**			*Analyzed:*	**856045**	8/12/19	09:05:00				
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814307	**1907389-23**										
		Collection:	07/25/2019		10:50:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811081											
	Prepared: **856045**										

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**								**EPA 8015B**		
				Analyzed:	**856045**		8/12/19	09:23:00			
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814308	**1907389-24**										
		Collection:	07/25/2019	10:55:00	Client				*Received:*	08/01/2019	
Supplement to Test Report 1811082											
Prepared:	**856045**										
				Analyzed:	**856045**		8/12/19	09:59:00			
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814309	**1907389-25**										
		Collection:	07/25/2019	12:00:00	Client				*Received:*	08/01/2019	
Supplement to Test Report 1811083											
Prepared:	**856045**										
				Analyzed:	**856045**		8/12/19	10:17:00			
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814310	**1907389-26**										
		Collection:	07/25/2019	12:05:00	Client				*Received:*	08/01/2019	
Supplement to Test Report 1811084											
Prepared:	**856045**										
				Analyzed:	**856045**		8/12/19	10:35:00			
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814311	**1907389-27**										
		Collection:	07/25/2019	12:09:00	Client				*Received:*	08/01/2019	

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CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**								**EPA 8015B**		
Supplement to Test Report 1811085											
Prepared:	**856045**										
				Analyzed:	**856045**			8/12/19	10:53:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814312	**1907389-28**										
		Collection:	07/25/2019		12:12:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811086											
Prepared:	**856045**										
				Analyzed:	**856045**			8/12/19	11:11:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814313	**1907389-29**										
		Collection:	07/25/2019		12:17:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811087											
Prepared:	**856045**										
				Analyzed:	**856045**			8/12/19	11:29:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814314	**1907389-30**										
		Collection:	07/25/2019		12:55:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811088											
Prepared:	**856045**										
				Analyzed:	**856045**			8/12/19	11:47:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00

ANA-LAB CORP. THE COMPLETE SERVICE LAB

Ana-Lab Corp. P.O. Box 9000 Kilgore, TX 75663

Phone 903/984-0551 FAX 903/984-5914 e-Mail corp@ana-lab.com

LELAP-accredited #02008

Results Summary

Printed 08/29/2019 Page 13 of 14

Project **887733**

Report To

DHL Analytical
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Corrected Report

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**									**EPA 8015B**	
1814315	**1907389-31**										
		Collection:	07/25/2019		13:00:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811089											
	Prepared: **856045**										
				Analyzed:	**856045**		8/12/19		12:05:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814316	**1907389-32**										
		Collection:	07/25/2019		13:05:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811090											
	Prepared: **856045**										
				Analyzed:	**856045**		8/12/19		12:23:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814317	**1907389-33**										
		Collection:	07/25/2019		13:15:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811091											
	Prepared: **856045**										
				Analyzed:	**856045**		8/12/19		12:41:00		
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00
1814318	**1907389-34**										
		Collection:	07/25/2019		13:20:00	Client			*Received:*	08/01/2019	
Supplement to Test Report 1811092											
	Prepared: **856045**										
				Analyzed:	**856045**		8/12/19		12:59:00		

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Results Summary

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Project 887733

Report To

DHL Analytical
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Corrected Report

CAS	Parameter	Results	MDL	SDL	MQL	MQLAdj	Flag	Units	Target	Bottle	Dilute
Solid & Chemical Materials	**Organics**					**EPA 8015B**					
141-43-5	**Monoethanolamine**	**ND**	25.0	25.0	50.0	50.0	HD	**mg/kg**		01	1.00

MDL is Method Detection Limit (40 CFR 136 Appendix B)
SDL is Sample Detection Limit and is the adjusted MDL (sample specific dilutions, dry weight)
MQL is the Method Quantitation Limit and corresponds to a low standard
MQLADJ is the Adjusted Method Quantitation Limit (dilutions, dry weight)

Qualifiers:

D - Duplicate RPD was higher than expected
H - Sample started outside recommended holding time
P - Spike recovery outside control limits due to matrix effects.
X - Standard reads higher than desired.

We report results on an As Received or wet basis unless marked Dry Weight. Unless otherwise noted, testing was performed at Ana-labs corporate laboratory that holds the following Federal and State certificates: EPA Lab Number TX00063, US Department of Agriculture Soil Import Permit P330-17-00117, Texas Commission on Environmental Quality Commercial Drinking Water Lab Approval (Lab ID: TX219), Texas Commission on Environmental Quality NELAP T104704201-19-15, Louisiana Department of Environmental Quality Laboratory Certification (NELAP, LELAP) #02008, Louisiana Department of Health and Hospitals Drinking Water (NELAP) Certificate No LA026, Oklahoma Department of Environmental Quality TNI Laboratory Accreditation Program Certificate No. 2018-126, Arkansas Department of Environmental Quality Certification #18-068-0. The Accredited column designates accreditation by N -- NELAC, or z -- not covered under NELAC scope of accreditation. These analytical results relate to the sample tested. This report may NOT be reproduced EXCEPT in FULL without written approval of Ana-Lab Corp. Unless otherwise specified, these test results meet the requirements of NELAC.

Trey Peery, MA, Project Manager

Ethics Service Quality ACIL 2005 Seal of Excellence Program Environmental

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QC Groups

08/29/2019 Page 1 of 1

Report To

DHL Analytical
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Project **887733**

	Test	*QCgroup*		*Analyzed*	
1096	HP5890 - 5890FID w/autosampler		Hewlett Packard		3133A37336
		mdea	**853,338**	08/09/2019	
		706E	**856,045**	08/09/2019	
		mdea	**853,338**	08/12/2019	
		706E	**856,045**	08/12/2019	
		DEAM	**855,959**	08/28/2019	
		DEAM	**855,959**	08/29/2019	

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Employee Owned Integrity Caring Continual Improvement

Quality Control

Printed 08/29/2019

887733

Report To

DHL Analytical
John Dupont
2300 Double Creek Dr
Round Rock, TX 78664

Account
DHL1-C

Analytical Set **853338** **EPA 1671**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
N-Methyldiethanolamine	853338	ND	25.0	25.0	mg/kg	120259155

CCV

Parameter	Reading	Known	Units	Recover%	Limits%		File
N-Methyldiethanolamine	250	250	mg/kg	99.9	70.0 - 130		120259152
	485	250	mg/kg	194	70.0 - 130	*	120259165
	245	250	mg/kg	97.9	70.0 - 130		120259179

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
N-Methyldiethanolamine	853338	248	407	250	70.0 - 130	99.2	163 *	mg/kg	48.7 *	30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
N-Methyldiethanolamine	1806023	81.2	116	ND	250	50.0 - 130	32.5 *	46.4 *	mg/kg	35.3 *	30.0

Analytical Set **855959** **EPA 8015B**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Diethylamine	855959	ND	500	500	mg/kg	120314919

CCV

Parameter	Reading	Known	Units	Recover%	Limits%		File
Diethylamine	540	500	mg/kg	108	70.0 - 130		120314916
	434	500	mg/kg	86.8	70.0 - 130		120314930
	470	500	mg/kg	93.9	70.0 - 130		120315564

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Diethylamine	855959	594	595	500	70.0 - 130	119	119	mg/kg	0	30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Diethylamine	1811092	679	720	ND	500	60.0 - 130	136 *	144 *	mg/kg	5.86	30.0

Analytical Set **856045** **EPA 8015B**

Blank

Parameter	PrepSet	Reading	MDL	MQL	Units	File
Monoethanolamine	856045	ND	25.0	50.0	mg/kg	120316261

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Monoethanolamine	271	250	mg/kg	108	70.0 - 130	120316258

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887733

CCV

Parameter	Reading	Known	Units	Recover%	Limits%	File
Monoethanolamine	291	250	mg/kg	116	70.0 - 130	120316271

LCS Dup

Parameter	PrepSet	LCS	LCSD	Known	Limits%	LCS%	LCSD%	Units	RPD	Limit%
Monoethanolamine	856045	299	176	250	57.5 - 140	120	70.4	mg/kg	52.1 *	30.0

MSD

Parameter	Sample	MS	MSD	UNK	Known	Limits	MS%	MSD%	Units	RPD	Limit%
Monoethanolamine	1806023	0	90.6	ND	250	50.0 - 130	0 *	36.2 *	mg/kg	200 *	30.0

* Out RPD is Relative Percent Difference: abs(r1-r2) / mean(r1,r2) * 100% Recover% is Recovery Percent: result / known * 100%

Blank - Method Blank; CCV - Continuing Calibration Verification

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887733 CoC Print Group 001 of 001

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX: *(512) 388-8229*

Work Order: 1907389

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Ana-Lab
2600 Dudley Rd
Kilgore, TX 75662

TEL: (903) 984-0551
FAX: (903) 984-5914
Acct #:

31-Jul-19

Sample Id	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests SW8015B					
03-01-0-2	Soil	-15B	07/25/19 10:00 AM	2-OZGJAR	1	1906	023			
03-01-2.5-3	Soil	-16B	07/25/19 10:10 AM	2-OZGJAR	1		024			
03-01-5-5.5	Soil	-17B	07/25/19 10:15 AM	2-OZGJAR	1		025			
03-01-7.5-8	Soil	-18B	07/25/19 10:20 AM	2-OZGJAR	1		026			
03-01-10-10.25	Soil	-19B	07/25/19 10:23 AM	2-OZGJAR	1		027			
03-02-0-2	Soil	-20B	07/25/19 10:37 AM	2-OZGJAR	1		028			
03-02-2.5-3	Soil	-21B	07/25/19 10:40 AM	2-OZGJAR	1		029			
03-02-5-5.25	Soil	-22B	07/25/19 10:45 AM	2-OZGJAR	1		030			
03-02-7.5-8	Soil	-23B	07/25/19 10:50 AM	2-OZGJAR	1		031			
03-02-10-10.25	Soil	-24B	07/25/19 10:55 AM	2-OZGJAR	1		032			
03-03-0-2	Soil	-25B	07/25/19 12:00 PM	2-OZGJAR	1		033			
03-03-2.5-3.5	Soil	-26B	07/25/19 12:05 PM	2-OZGJAR	1		034			
03-03-5-5.5	Soil	-27B	07/25/19 12:09 PM	2-OZGJAR	1		035			
03-03-7.5-7.75	Soil	-28B	07/25/19 12:12 PM	2-OZGJAR	1		036			
03-03-10-10.25	Soil	-29B	07/25/19 12:17 PM	2-OZGJAR	1		037			
03-04-0-2	Soil	-30B	07/25/19 12:55 PM	2-OZGJAR	1		038			
03-04-2.5-4	Soil	-31B	07/25/19 01:00 PM	2-OZGJAR	1		039			
03-04-5-7	Soil	-32B	07/25/19 01:05 PM	2-OZGJAR	1		040			

General Comments:

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

no R.moist, report as received!

See Attached for Tracking # and Temp

		Date/Time			Date/Time
Relinquished by:		7/24/19 1700	Received by:		
Relinquished by:	LSO	8/1/19 0825	Received by:		8/1/19 0825

Christi Parker Ana-Lab

Received by OCD: 4/3/2023 2:46:30 PM
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887733 CoC Print Group 001 of 001

DHL Analytical, Inc.
2300 Double Creek Drive
Round Rock, TX 78664
TEL: *(512) 388-8222* FAX: *(512) 388-8229*

Work Order: 1907389

CHAIN-OF-CUSTODY RECORD

Subcontractor:

Ana-Lab
2600 Dudley Rd
Kilgore, TX 75662

TEL: (903) 984-0551
FAX: (903) 984-5914
Acct #:

31-Jul-19

Sample Id	Matrix	DHL#	Date Collected	Bottle Type	Requested Tests SW8015B					
03-04-7.5-9	Soil	-33B	07/25/19 01:15 PM	2-OZGJAR	1	180604/002				
03-04-10-10.5	Soil	-34B	07/25/19 01:20 PM	2-OZGJAR	1					

General Comments:

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

See Attached for
Tracking # and Temp

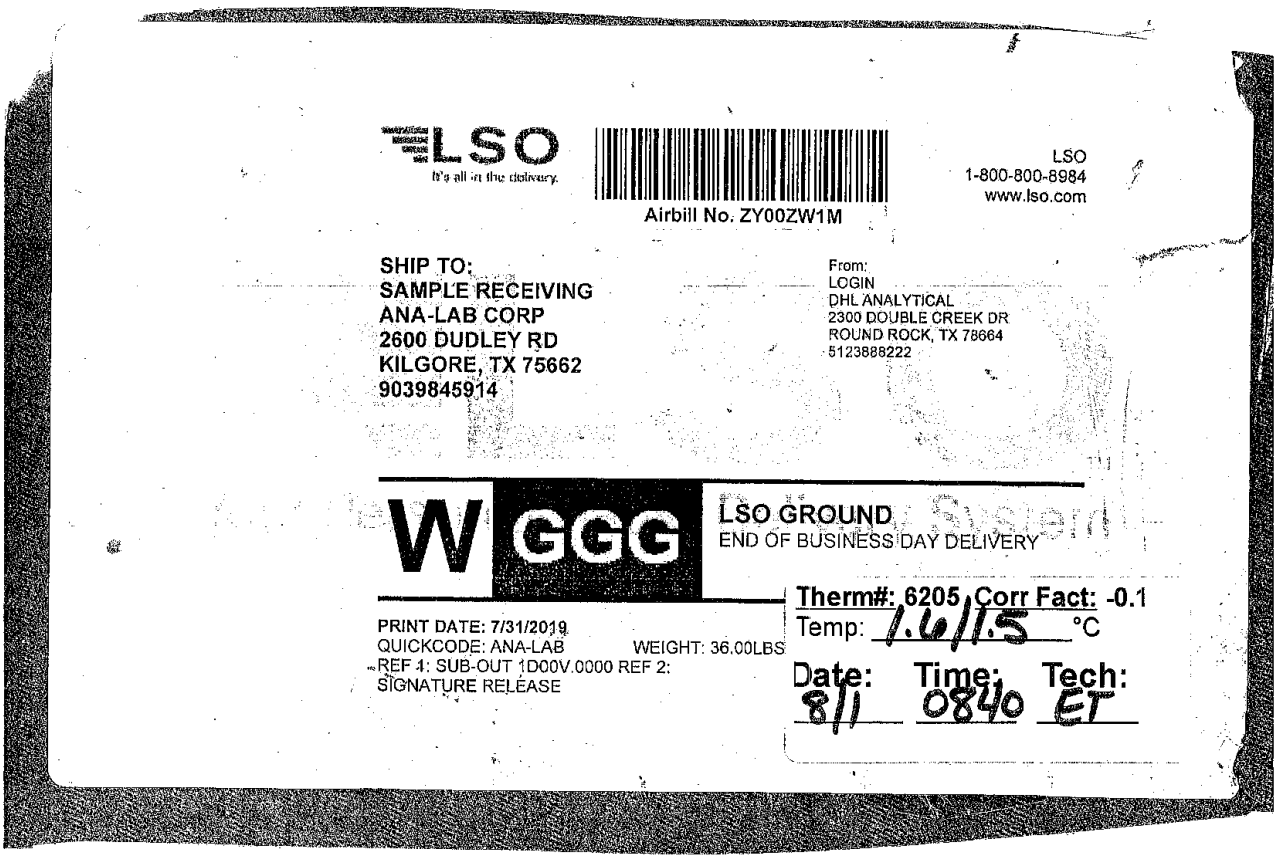
		Date/Time			Date/Time
Relinquished by:	LSO	7/31/19 1700	Received by:	LSO	8/1/19 0825
Relinquished by:	LSO	8/1/19 0825	Received by:		

Christi Parker Ana-Lab

Received by OCD: 4/3/2023 2:46:30 PM
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3 of 3

887733 CoC Print Group 001 of 001



LSO
It's all in the delivery.

Airbill No. ZY00ZW1M

LSO
1-800-800-8984
www.lso.com

SHIP TO:
SAMPLE RECEIVING
ANA-LAB CORP
2600 DUDLEY RD
KILGORE, TX 75662
9039845914

From:
LOGIN
DHL ANALYTICAL
2300 DOUBLE CREEK DR
ROUND ROCK, TX 78664
5123888222

WGGG

LSO GROUND
END OF BUSINESS DAY DELIVERY

PRINT DATE: 7/31/2019
QUICKCODE: ANA-LAB WEIGHT: 36.00LBS
REF 1: SUB-OUT 1D00V.0000 REF 2:
SIGNATURE RELEASE

Therm#: 6205 Corr Fact: -0.1
Temp: 1.6/1.5 °C
Date: 8/1 Time: 0840 Tech: ET

Appendix A:		Laboratory Review Checklist: Reportable Data						
Laboratory Name: ANA-LAB			LRC Date: 08/29/2019					
Project Name: Corrected Report			Laboratory Job (Project) Number: 887733					
Reviewer Name: Trey Peery, MA (WP3)			PrepSet: 853338 QCgroup: 853338					
#	A	Description	Yes	No	NA	NR	ER#
R01	OI	**Chain-of-Custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?				X	1
		Were all departures from standard conditions described in the exception report?	X				
R02	OI	**Sample and Quality Control (QC) Identification**					
		Are all field sample ID numbers cross referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R03	OI	**Test Reports**					
		Were all samples prepared and analyzed within holding times?		X			2
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		If required for the project, tentatively identified compounds reported?			X		
R04	O	**Surrogate Recovery Data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R05	OI	**Test Reports/Summary Forms for Blank Samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were blank concentrations < MQL?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
R06	OI	**Laboratory Control Samples (LCS)**					
		Were all chemicals of concern included in the LCS?			X		
		Was each LCS taken though the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCS duplicate, if applicable) %Rs within the laboratory QC limits?		X			3
		Does the detectability data document the laboratory's capability to detect the chemicals of concern at the MDL used to calculate the SQLs?	X				
		Was the LCS duplicate relative percent difference within QC limits?		X			4
R07		**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			5
		Were MS/MSD RPDs within laboratory QC limits?		X			6
R08	OI	**Analytical Duplicate Data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R09	OI	**Method Quantitation Limits (MQLs)**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	**Other Problems/Anomalies**					
		Are all known problems/anomalies/special condition noted in this LRC and ER?	X				
		Were all necessary corrective actions preformed for the reported data?	X				
		Was applicable and available technology used to lower the SQL and minimize the matrix interference effects on the sample results?	X				

Appendix A:	Laboratory Review Checklist: Reportable Data		
Laboratory Name:	ANA-LAB	LRC Date:	08/29/2019
Project Name:	Corrected Report	Laboratory Job (Project) Number:	887733
Reviewer Name:	Trey Peery, MA (WP3)	PrepSet: 853338	QCgroup: 853338

#	A	Description	Yes	No	NA	NR	ER#
S01	OI	**Initial Calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S02	OI	**Initial and Continuing Calibration Verification (ICCV and CCV) and Continuing Calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?		X			7
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MQL?			X		
S03	O	**Mass Spectral Tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S04	O	**Internal Standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S05	OI	**Raw Data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section . . .)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S06	O	**Dual Column Confirmation**					
		Did dual column confirmation results meet the method-required QC?	X				
S07	O	**Tentatively Identified Compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S08	I	**Interference Check Sample (ICS) Results**					
		Were precent recoveries within method QC limits?			X		
S09	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method Detection Limit (MDL) Studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or suppported by the analysis of detectability check samples?	X				
S11	OI	**Proficiency Test Reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards Documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other apropriate sources?	X				
S13	IO	**Compound/Analyte Identification Procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of Analyst Compentency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC Section 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/Validation Documentation Methods (NELAC Chapter 5 or ISO/IEC Section 5)**					
		Are all the methods used to generate the data documented, verified and validated, where applicable?	X				
S16	OI	**Laboratory Standard Operating Procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included on the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = ionorganic analyses (and general chemistry, when applicable);
3. N/A = Not applicable;
4. NR = Not reviewed
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A:		Laboratory Review Checklist: Reportable Data						
Laboratory Name: ANA-LAB			LRC Date: 08/29/2019					
Project Name: Corrected Report			Laboratory Job (Project) Number: 887733					
Reviewer Name: Trey Peery, MA (WP3)			PrepSet: 855959 QCgroup: 855959					
#	A	Description	Yes	No	NA	NR	ER#
R01	OI	**Chain-of-Custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?				X	1
		Were all departures from standard conditions described in the exception report?	X				
R02	OI	**Sample and Quality Control (QC) Identification**					
		Are all field sample ID numbers cross referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R03	OI	**Test Reports**					
		Were all samples prepared and analyzed within holding times?		X			2
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		If required for the project, tentatively identified compounds reported?			X		
R04	O	**Surrogate Recovery Data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R05	OI	**Test Reports/Summary Forms for Blank Samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were blank concentrations < MQL?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
R06	OI	**Laboratory Control Samples (LCS)**					
		Were all chemicals of concern included in the LCS?			X		
		Was each LCS taken though the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCS duplicate, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the chemicals of concern at the MDL used to calculate the SQLs?	X				
		Was the LCS duplicate relative percent difference within QC limits?	X				
R07		**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			3
		Were MS/MSD RPDs within laboratory QC limits?	X				
R08	OI	**Analytical Duplicate Data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R09	OI	**Method Quantitation Limits (MQLs)**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	**Other Problems/Anomalies**					
		Are all known problems/anomalies/special condition noted in this LRC and ER?	X				
		Were all necessary corrective actions preformed for the reported data?	X				
		Was applicable and available technology used to lower the SQL and minimize the matrix interference effects on the sample results?	X				

Appendix A:		Laboratory Review Checklist: Reportable Data						
Laboratory Name: ANA-LAB			LRC Date: 08/29/2019					
Project Name: Corrected Report			Laboratory Job (Project) Number: 887733					
Reviewer Name: Trey Peery, MA (WP3)			PrepSet: 855959 QCgroup: 855959					
#	A	Description	Yes	No	NA	NR	ER#
S01	OI	**Initial Calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S02	OI	**Initial and Continuing Calibration Verification (ICCV and CCV) and Continuing Calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MQL?			X		
S03	O	**Mass Spectral Tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S04	O	**Internal Standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S05	OI	**Raw Data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section . . .)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S06	O	**Dual Column Confirmation**					
		Did dual column confirmation results meet the method-required QC?	X				
S07	O	**Tentatively Identified Compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S08	I	**Interference Check Sample (ICS) Results**					
		Were precent recoveries within method QC limits?			X		
S09	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method Detection Limit (MDL) Studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or suppported by the analysis of detectability check samples?	X				
S11	OI	**Proficiency Test Reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards Documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other apropriate sources?	X				
S13	IO	**Compound/Analyte Identification Procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of Analyst Compentency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC Section 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/Validation Documentation Methods (NELAC Chapter 5 or ISO/IEC Section 5)**					
		Are all the methods used to generate the data documented, verified and validated, where applicable?	X				
S16	OI	**Laboratory Standard Operating Procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included on the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = ionorganic analyses (and general chemistry, when applicable);
3. N/A = Not applicable;
4. NR = Not reviewed
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A:		Laboratory Review Checklist: Reportable Data						
Laboratory Name: ANA-LAB			LRC Date: 08/29/2019					
Project Name: Corrected Report			Laboratory Job (Project) Number: 887733					
Reviewer Name: Trey Peery, MA (WP3)			PrepSet: 856045 QCgroup: 856045					
#	A	Description	Yes	No	NA	NR	ER#
R01	OI	**Chain-of-Custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?				X	1
		Were all departures from standard conditions described in the exception report?	X				
R02	OI	**Sample and Quality Control (QC) Identification**					
		Are all field sample ID numbers cross referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R03	OI	**Test Reports**					
		Were all samples prepared and analyzed within holding times?		X			2
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		If required for the project, tentatively identified compounds reported?			X		
R04	O	**Surrogate Recovery Data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R05	OI	**Test Reports/Summary Forms for Blank Samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were blank concentrations < MQL?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
R06	OI	**Laboratory Control Samples (LCS)**					
		Were all chemicals of concern included in the LCS?			X		
		Was each LCS taken though the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCS duplicate, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the chemicals of concern at the MDL used to calculate the SQLs?	X				
		Was the LCS duplicate relative percent difference within QC limits?		X			3
R07		**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			4
		Were MS/MSD RPDs within laboratory QC limits?		X			5
R08	OI	**Analytical Duplicate Data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R09	OI	**Method Quantitation Limits (MQLs)**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	**Other Problems/Anomalies**					
		Are all known problems/anomalies/special condition noted in this LRC and ER?	X				
		Were all necessary corrective actions preformed for the reported data?	X				
		Was applicable and available technology used to lower the SQL and minimize the matrix interference effects on the sample results?	X				

Appendix A:	Laboratory Review Checklist: Reportable Data		
Laboratory Name:	ANA-LAB	LRC Date:	08/29/2019
Project Name:	Corrected Report	Laboratory Job (Project) Number:	887733
Reviewer Name:	Trey Peery, MA (WP3)	PrepSet: 856045	QCgroup: 856045

#	A	Description	Yes	No	NA	NR	ER#
S01	OI	**Initial Calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S02	OI	**Initial and Continuing Calibration Verification (ICCV and CCV) and Continuing Calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MQL?			X		
S03	O	**Mass Spectral Tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S04	O	**Internal Standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S05	OI	**Raw Data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section . . .)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S06	O	**Dual Column Confirmation**					
		Did dual column confirmation results meet the method-required QC?	X				
S07	O	**Tentatively Identified Compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S08	I	**Interference Check Sample (ICS) Results**					
		Were precent recoveries within method QC limits?			X		
S09	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method Detection Limit (MDL) Studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or suppported by the analysis of detectability check samples?	X				
S11	OI	**Proficiency Test Reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards Documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other apropriate sources?	X				
S13	IO	**Compound/Analyte Identification Procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of Analyst Compentency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC Section 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/Validation Documentation Methods (NELAC Chapter 5 or ISO/IEC Section 5)**					
		Are all the methods used to generate the data documented, verified and validated, where applicable?	X				
S16	OI	**Laboratory Standard Operating Procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included on the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = ionorganic analyses (and general chemistry, when applicable);
3. N/A = Not applicable;
4. NR = Not reviewed
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A: (cont'd):	Laboratory Review Checklist: Exception Reports		
Laboratory Name:	ANA-LAB	LRC Date:	08/29/2019
Project Name:	Corrected Report	Laboratory Job (Project) Number:	887733
Reviewer Name:	Trey Peery, MA (WP3)	PrepSet: 853338	QCgroup: 853338

ER#	Description
1	Bottles were reviewed at login. Please see the chain of custody record for sample receipt details.
2	The following samples were analyzed outside EPA recommended holding times: 1814298, 1814298, 1814299, 1814299, 1814300, 1814300, 1814301, 1814301, 1814302, 1814302, 1814304, 1814304, 1814305, 1814305, 1814306, 1814306, 1814307, 1814307, 1814308, 1814308, 1814309, 1814309, 1814310, 1814310, 1814311, 1814311, 1814312, 1814312, 1814313, 1814313, 1814314, 1814314, 1814315, 1814315, 1814316, 1814316, 1814317, 1814317, 1814318, 1814318
3	The following LCS/LCSD constituents have recoveries outside of laboratory QC limits: (LCSD) N-Methyldiethanolamine
4	The following LCSD constituents have RPDs outside of laboratory QC limits: N-Methyldiethanolamine
5	The following MS/MSD constituents have recoveries outside of laboratory QC limits: (MSD) N-Methyldiethanolamine
6	The following MSD constituents have RPDs outside of laboratory QC limits: N-Methyldiethanolamine
7	The following CCV constituents have recoveries outside of laboratory QC limits: N-Methyldiethanolamine

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Appendix A: (cont'd):	Laboratory Review Checklist: Exception Reports		
Laboratory Name:	ANA-LAB	LRC Date:	08/29/2019
Project Name:	Corrected Report	Laboratory Job (Project) Number:	887733
Reviewer Name:	Trey Peery, MA (WP3)	PrepSet: 855959	QCgroup: 855959

ER#	Description
1	Bottles were reviewed at login. Please see the chain of custody record for sample receipt details.
2	The following samples were analyzed outside EPA recommended holding times: 1814298, 1814298, 1814299, 1814299, 1814300, 1814300, 1814301, 1814301, 1814302, 1814302, 1814304, 1814304, 1814305, 1814305, 1814306, 1814306, 1814307, 1814307, 1814308, 1814308, 1814309, 1814309, 1814310, 1814310, 1814311, 1814311, 1814312, 1814312, 1814313, 1814313, 1814314, 1814314, 1814315, 1814315, 1814316, 1814316, 1814317, 1814317, 1814318, 1814318
3	The following MS/MSD constituents have recoveries outside of laboratory QC limits: (MSD) Diethylamine

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

Appendix A: (cont'd):	Laboratory Review Checklist: Exception Reports		
Laboratory Name:	ANA-LAB	LRC Date:	08/29/2019
Project Name:	Corrected Report	Laboratory Job (Project) Number:	887733
Reviewer Name:	Trey Peery, MA (WP3)	PrepSet: 856045	QCgroup: 856045

ER#	Description
1	Bottles were reviewed at login. Please see the chain of custody record for sample receipt details.
2	The following samples were analyzed outside EPA recommended holding times: 1814298, 1814298, 1814299, 1814299, 1814300, 1814300, 1814301, 1814301, 1814302, 1814302, 1814304, 1814304, 1814305, 1814305, 1814306, 1814306, 1814307, 1814307, 1814308, 1814308, 1814309, 1814309, 1814310, 1814310, 1814311, 1814311, 1814312, 1814312, 1814313, 1814313, 1814314, 1814314, 1814315, 1814315, 1814316, 1814316, 1814317, 1814317, 1814318, 1814318
3	The following LCSD constituents have RPDs outside of laboratory QC limits: Monoethanolamine
4	The following MS/MSD constituents have recoveries outside of laboratory QC limits: (MSD) Monoethanolamine
5	The following MSD constituents have RPDs outside of laboratory QC limits: Monoethanolamine

1 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

June 25, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1906172

RE: AKA Energy/Empire ABO

Dear Mark Larson:

DHL Analytical, Inc. received 4 sample(s) on 6/18/2019 for the analyses presented in the following report.

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

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

Sincerely,

John DuPont
General Manager

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

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1904172

№ 0288

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-17-2019 PAGE 1 OF 1

PO#: LAB WORK ORDER#:

PROJECT LOCATION OR NAME: AKA Energy / Empire Abo

LAI PROJECT #: 6-0141-11 COLLECTOR: ML

TRRP report? ☐ Yes ☑ No

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

TIME ZONE: Time zone/State: Mtn / NM

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☐ MTBE ☐ / TRPH 418.1 ☐ / TPH 1005 ☐ / TPH 1006 ☐ / GASOLINE MOD 8015 ☐ / DIESEL - MOD 8015 ☐ / OIL - MOD 8015 ☐ / VOC 8260 ☐ / SVOC 8270 ☐ / PAH 8270 ☐ / HOLDPAH ☐ / 8081 PESTICIDES ☐ / 8151 HERBICIDES ☐ / 8082 PCBS ☐ / TBLP - METALS (RCRA) ☐ / TCLP VOC ☐ / TCLP - PEST ☐ / HERB ☐ / Semi-VOC ☐ / TOTAL METALS (RCRA) ☐ / OTHER LIST ☐ / LEAD - TOTAL ☐ / D.W. 200.8 ☐ / TCLP ☐ / RCI ☐ / TOX ☐ / FLASHPOINT ☐ / TDS ☐ / TSS ☐ / % MOISTURE ☐ / CYANIDE ☐ / pH ☐ / HEXAVALENT CHROMIUM ☐ / EXPLOSIVES ☐ / PECHLORATE ☐ / CHLORIDE ☐ / ANIONS ☐ / ALKALINITY ☐	FIELD NOTES
S-1	01	6/14/19	12:15	S	1				X			
S-2	02		12:20	S	1				X			
S-3	03		13:20	S	1				X			
Comp-3	04	↓	13:25	S	1				X			
TOTAL												

RELINQUISHED BY:(Signature) DATE/TIME 6/17/19 15:00 RECEIVED BY:(Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 6/18/19 7:43 RECEIVED BY:(Signature)

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

LABORATORY: DHL

3

TURN AROUND TIME
NORMAL ☐
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 4.7°C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # ☐ HAND DELIVERED

Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

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LSO

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Airbill No. LSO065Y5

LSO065Y5

1. To: Print Name (Person) _____ Phone (Important) _____

Company Name _____

Street Address (No P.O. Box or P.O. Box Zip Code*Deliveries) _____

Suite / Floor _____

City _____ State _____ Zip _____

2. From: Print Name (Person) JOHN WHITE Phone (Important) 432-687-0901

Company Name LARSON & ASSOCIATES

Street Address 507 NORTH MARIENFELD

Suite / Floor 205

City MIDLAND State TX Zip 79701

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3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- ☒ LSO Priority Overnight* By 10:30 a.m. to most cities
- ☐ LSO Early Overnight* By 8:30 a.m. select cities
- ☐ LSO Economy Next Day* By 3 p.m. to most cities
- ☐ LSO 2nd Day*
- ☐ LSO Ground
- ☐ LSO Saturday*
- ☐ Other _____

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

☐ Deliver Without Delivery Signature (See Limits of Liability below)

_____
Release Signature

L 10 x W 10 x H 10

4. Package: Weight: 1 lbs

Your Company's Billing Reference Information _____

Ship Date: (mm/dd/yy) 06/17/19

5. Payment:

FOR DRIVER USE ONLY

Driver Number 107678

☐ Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location DL

Date: 6-17-19

Time: _____

City Code: _____

072598

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. **NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY.** See LSO Service Guide for further details.

CUSTODY SEAL QEC Quality Environmental Containers 800-255-3950 • www.qecusa.com DATE SIGNATURE

Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates

Date Received: 6/18/2019

Work Order Number 1906172

Received by JW

Checklist completed by: _____ 6/18/2019
Signature Date

Reviewed by _____ 6/18/2019
Initials Date

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	4.7 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

DHL Analytical, Inc. **Date:** *25-Jun-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1906172

CASE NARRATIVE

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

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

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For PCB Analysis, the recovery of surrogate Decachlorobiphenyl for Sample S-1 and the Matrix Spike Duplicate (190623301 MSD) was below the method control limits. These are flagged accordingly in the Analytical Data Report and the QC Summary Report. The remaining surrogate for these samples was within method control limits. No further corrective action was taken.

For PCB Analysis, the recovery of Aroclor 1260 for the Matrix Spike Duplicate (1906233-01 MSD) was below the method control limits. This is flagged accordingly in the QC Summary Report. This aroclor was within method control limits in the associated LCS/MS. No further corrective action was taken.

DHL Analytical, Inc.

Date: *25-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	S-1
Project:	AKA Energy/Empire ABO	**Lab ID:**	1906172-01
Project No:	6-0141-11	**Collection Date:**	06/14/19 12:15 PM
Lab Order:	1906172	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0514	0.0514	0.103		mg/Kg-dry	1	06/24/19 12:19 PM
Aroclor 1221	<0.0514	0.0514	0.103		mg/Kg-dry	1	06/24/19 12:19 PM
Aroclor 1232	<0.0514	0.0514	0.103		mg/Kg-dry	1	06/24/19 12:19 PM
Aroclor 1242	<0.0514	0.0514	0.103		mg/Kg-dry	1	06/24/19 12:19 PM
Aroclor 1248	<0.0514	0.0514	0.103		mg/Kg-dry	1	06/24/19 12:19 PM
Aroclor 1254	0.936	0.0514	0.103		mg/Kg-dry	1	06/24/19 12:19 PM
Aroclor 1260	<0.0514	0.0514	0.103		mg/Kg-dry	1	06/24/19 12:19 PM
Total PCBs	0.936	0.0514	0.103		mg/Kg-dry	1	06/24/19 12:19 PM
Surr: Decachlorobiphenyl	48.7	0	58-125	S	%REC	1	06/24/19 12:19 PM
Surr: Tetrachloro-m-xylene	91.3	0	40-130		%REC	1	06/24/19 12:19 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	8.60	0	0		WT%	1	06/20/19 08:46 AM

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

DHL Analytical, Inc.

Date: *25-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	S-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1906172-02
Project No:	6-0141-11	**Collection Date:**	06/14/19 12:20 PM
Lab Order:	1906172	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/24/19 11:28 AM
Aroclor 1221	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/24/19 11:28 AM
Aroclor 1232	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/24/19 11:28 AM
Aroclor 1242	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/24/19 11:28 AM
Aroclor 1248	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/24/19 11:28 AM
Aroclor 1254	1.29	0.0589	0.118		mg/Kg-dry	1	06/24/19 11:28 AM
Aroclor 1260	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/24/19 11:28 AM
Total PCBs	1.29	0.0589	0.118		mg/Kg-dry	1	06/24/19 11:28 AM
Surr: Decachlorobiphenyl	60.1	0	58-125		%REC	1	06/24/19 11:28 AM
Surr: Tetrachloro-m-xylene	94.0	0	40-130		%REC	1	06/24/19 11:28 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	16.3	0	0		WT%	1	06/20/19 08:46 AM

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

DHL Analytical, Inc.

Date: *25-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	S-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1906172-03
Project No:	6-0141-11	**Collection Date:**	06/14/19 01:20 PM
Lab Order:	1906172	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0597	0.0597	0.119		mg/Kg-dry	1	06/24/19 10:37 AM
Aroclor 1221	<0.0597	0.0597	0.119		mg/Kg-dry	1	06/24/19 10:37 AM
Aroclor 1232	<0.0597	0.0597	0.119		mg/Kg-dry	1	06/24/19 10:37 AM
Aroclor 1242	<0.0597	0.0597	0.119		mg/Kg-dry	1	06/24/19 10:37 AM
Aroclor 1248	<0.0597	0.0597	0.119		mg/Kg-dry	1	06/24/19 10:37 AM
Aroclor 1254	0.186	0.0597	0.119		mg/Kg-dry	1	06/24/19 10:37 AM
Aroclor 1260	<0.0597	0.0597	0.119		mg/Kg-dry	1	06/24/19 10:37 AM
Total PCBs	0.186	0.0597	0.119		mg/Kg-dry	1	06/24/19 10:37 AM
Surr: Decachlorobiphenyl	62.7	0	58-125		%REC	1	06/24/19 10:37 AM
Surr: Tetrachloro-m-xylene	88.8	0	40-130		%REC	1	06/24/19 10:37 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	17.2	0	0		WT%	1	06/20/19 08:46 AM

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

DHL Analytical, Inc.

Date: *25-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	COMP 3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1906172-04
Project No:	6-0141-11	**Collection Date:**	06/14/19 01:25 PM
Lab Order:	1906172	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0527	0.0527	0.105		mg/Kg-dry	1	06/24/19 11:53 AM
Aroclor 1221	<0.0527	0.0527	0.105		mg/Kg-dry	1	06/24/19 11:53 AM
Aroclor 1232	<0.0527	0.0527	0.105		mg/Kg-dry	1	06/24/19 11:53 AM
Aroclor 1242	<0.0527	0.0527	0.105		mg/Kg-dry	1	06/24/19 11:53 AM
Aroclor 1248	<0.0527	0.0527	0.105		mg/Kg-dry	1	06/24/19 11:53 AM
Aroclor 1254	0.576	0.0527	0.105		mg/Kg-dry	1	06/24/19 11:53 AM
Aroclor 1260	<0.0527	0.0527	0.105		mg/Kg-dry	1	06/24/19 11:53 AM
Total PCBs	0.576	0.0527	0.105		mg/Kg-dry	1	06/24/19 11:53 AM
Surr: Decachlorobiphenyl	61.1	0	58-125		%REC	1	06/24/19 11:53 AM
Surr: Tetrachloro-m-xylene	89.0	0	40-130		%REC	1	06/24/19 11:53 AM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	9.16	0	0		WT%	1	06/20/19 08:46 AM

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

DHL Analytical, Inc. **Date:** *25-Jun-19*

CLIENT: Larson & Associates
Work Order: 1906172
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190624A

The QC data in batch 91449 applies to the following samples: 1906172-01A, 1906172-02A, 1906172-03A, 1906172-04A

Sample ID **LCS-91449** Batch ID: **91449** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_190624A** Analysis Date: **6/24/2019 9:21:00 AM** Prep Date: **6/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.912	0.100	1.000	0	91.2	41	138			
Aroclor 1260	0.855	0.100	1.000	0	85.5	61	131			
Surr: Decachlorobiphenyl	0.0753		0.1000		75.3	58	125			
Surr: Tetrachloro-m-xylene	0.0944		0.1000		94.4	40	130			

Sample ID **MB-91449** Batch ID: **91449** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_190624A** Analysis Date: **6/24/2019 9:47:00 AM** Prep Date: **6/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0922		0.1000		92.2	58	125			
Surr: Tetrachloro-m-xylene	0.0994		0.1000		99.4	40	130			

Sample ID **1906233-01CMS** Batch ID: **91449** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MS** Run ID: **GC16_190624A** Analysis Date: **6/24/2019 2:03:00 PM** Prep Date: **6/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.770	0.0955	0.9551	0	80.6	41	138			
Aroclor 1260	0.581	0.0955	0.9551	0	60.8	61	131			
Surr: Decachlorobiphenyl	0.0551		0.09551		57.7	58	125			
Surr: Tetrachloro-m-xylene	0.0875		0.09551		91.7	40	130			

Sample ID **1906233-01CMSD** Batch ID: **91449** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MSD** Run ID: **GC16_190624A** Analysis Date: **6/24/2019 2:28:00 PM** Prep Date: **6/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.699	0.0957	0.9569	0	73.0	41	138	9.72	50	
Aroclor 1260	0.552	0.0957	0.9569	0	57.7	61	131	5.01	50	S
Surr: Decachlorobiphenyl	0.0515		0.09569		53.8	58	125	0		S
Surr: Tetrachloro-m-xylene	0.0742		0.09569		77.5	40	130	0		

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

CLIENT: Larson & Associates
Work Order: 1906172
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190619A**

The QC data in batch 91395 applies to the following samples: 1906172-01A, 1906172-02A, 1906172-03A, 1906172-04A

Sample ID **1906144-01B-DUP** Batch ID: **91395** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190619A** Analysis Date: **6/20/2019 8:46:00 AM** Prep Date: **6/19/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	11.9	0	0	11.29				5.32	30	

Qualifiers:

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

June 28, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1906239

RE: AKA Energy/Empire ABO

Dear Mark Larson:

DHL Analytical, Inc. received 16 sample(s) on 6/22/2019 for the analyses presented in the following report.

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

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

Sincerely,

John DuPont
General Manager

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

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Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

№ 0290

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-20-2019 PAGE 1 OF 2

PO#: LAB WORK ORDER#: 1906239

PROJECT LOCATION OR NAME: AKA Energy / Empire ABO

LAI PROJECT #: 6-0141-11 COLLECTOR: ML

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: Mtn/NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES: BTEX ☐ MTBE ☐	TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL - MOD 8015 ☐	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐	HOLD	FIELD NOTES
EA-10-S-1	01	6/11/19	13:05	S	1					X							X						X						X		Analyze for All Analytes Per Larson 06/24/19 JC
S-2	02		13:15		1												X						X						X		
S-3	03		13:20		1												X						X						X		
S-4	04		13:25		1												X						X						X		HOLD
S-5	05		13:30		1												X						X						X		
S-6	06		13:36		1												X						X						X		
S-7	07		13:40		1												X						X						X		
S-8	08		13:43		1												X						X						X		
S-9	09		13:45		1												X						X						X		
S-10	10		13:47		1												X						X						X		
S-11	11		13:52		1												X						X						X		
S-12	12		13:55		1												X						X						X		
S-13	13		14:00		1												X						X						X		
S-14	14		14:05		1												X						X						X		
S-15	15		14:09		1												X						X						X		
TOTAL																															

RELINQUISHED BY:(Signature) DATE/TIME 6/21/19 14:00 RECEIVED BY: (Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 6/22/19 5:00 PM RECEIVED BY: (Signature)

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

LABORATORY: DHL

3

TURN AROUND TIME

NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:

RECEIVING TEMP: 4.9 THERM#: 78

CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED

☑ CARRIER BILL # ☐ HAND DELIVERED

Page 351 of 699

Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

№ 0291

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-20-2019 PAGE 2 OF 2

PO#: LAB WORK ORDER#: 1906239

PROJECT LOCATION OR NAME: AKA Energy / 6-01141-11

LAI PROJECT #: Empire ABO COLLECTOR: MA

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: MTN/WM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES: BTEX ☐ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☐ TPH 1006 ☐	GASOLINE MOD 8015 ☐	DIESEL - MOD 8015 ☐	OIL - MOD 8015 ☐	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBs ☒	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☐ PECHLORATE ☐	CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐	Hold	FIELD NOTES
EA-10-S-16	16	4/11/19	14:12	S	1				X										X					X					X		Hold
TOTAL																															

RELINQUISHED BY:(Signature) DATE/TIME 6/21/19 16:00 RECEIVED BY: (Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 6/22/19 5:00 PM RECEIVED BY: (Signature) AM

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

LABORATORY: DHL

4

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 4.9 THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☑ CARRIER BILL #
☐ HAND DELIVERED

129923 AF

LSO

WWW.LSO.COM
Questions? Call 800-800-8984

Airbill No. LSO0BYH8

LSO0BYH8

1. To: Print Name (Person) | Phone (Important)

Company Name

Street Address (No P.O. Box or P.O. Box Zip Code® Deliveries)

Suite / Floor

City | State | Zip

2. From: Print Name (Person) | Phone (Important) 432-687-0901

Company Name

Street Address

Suite / Floor

City | State | Zip 79701

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- ☒ LSO Priority Overnight* By 10:30 a.m. to most cities
- ☐ LSO Early Overnight* By 8:30 a.m. select cities
- ☐ LSO Economy Next Day* By 3 p.m. to most cities
- ☐ LSO 2nd Day*
- ☐ LSO Ground
- ☒ LSO Saturday*
- ☐ Other

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

☐ Deliver Without Delivery Signature (See Limits of Liability below)

Release Signature

L 16 x W 10 x H 14

4. Package: Weight:

Your Company's Billing Reference Information

Ship Date: (mm/dd/yy) / /

5. Payment:

FOR DRIVER USE ONLY

Driver Number 1976

☐ Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location

Date: 12-19

Time: 5:00

City Code: AUS

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY. See LSO Service Guide for further details.

CUSTODY SEAL
DATE 12/19/19
SIGNATURE

QEC
Quality Environmental Containers
800-255-3950 • www.qecusa.com

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates Date Received: 6/22/2019

Work Order Number 1906239 Received by AH

Checklist completed by: _____ 6/24/2019 Reviewed by CC 6/24/2019
Signature Date Initials Date

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	4.9 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

DHL Analytical, Inc. **Date:** *28-Jun-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1906239

CASE NARRATIVE

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

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

All method blanks, sample duplicates, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For PCB analysis by method SW8082A the matrix spike duplicate recovery was slightly below control limits for Aroclor 1260. This is flagged accordingly in the enclosed QC summary report. The "S" flag denotes spike recovery was outside control limits. The LCS was within control limits for this analyte. No further corrective actions were taken.

For PCB analysis by method SW8082A the surrogate recoveries for all samples and the matrix spike duplicate were slightly below control limits for Decachlorobiphenyl. These are flagged accordingly. The remaining surrogate was within control limits. No further corrective actions were taken.

DHL Analytical, Inc.

Date: *28-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	EA-10-S-1
Project:	AKA Energy/Empire ABO	**Lab ID:**	1906239-01
Project No:	6-0141-11	**Collection Date:**	06/11/19 01:05 PM
Lab Order:	1906239	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0658	0.0658	0.132		mg/Kg-dry	1	06/24/19 12:46 PM
Aroclor 1221	<0.0658	0.0658	0.132		mg/Kg-dry	1	06/24/19 12:46 PM
Aroclor 1232	<0.0658	0.0658	0.132		mg/Kg-dry	1	06/24/19 12:46 PM
Aroclor 1242	<0.0658	0.0658	0.132		mg/Kg-dry	1	06/24/19 12:46 PM
Aroclor 1248	<0.0658	0.0658	0.132		mg/Kg-dry	1	06/24/19 12:46 PM
Aroclor 1254	0.0921	0.0658	0.132	J	mg/Kg-dry	1	06/24/19 12:46 PM
Aroclor 1260	<0.0658	0.0658	0.132		mg/Kg-dry	1	06/24/19 12:46 PM
Total PCBs	0.0921	0.0658	0.132	J	mg/Kg-dry	1	06/24/19 12:46 PM
Surr: Decachlorobiphenyl	55.3	0	58-125	S	%REC	1	06/24/19 12:46 PM
Surr: Tetrachloro-m-xylene	70.1	0	40-130		%REC	1	06/24/19 12:46 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	27.7	0	0		WT%	1	06/26/19 09:11 AM

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

DHL Analytical, Inc.

Date: *28-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	EA-10-S-2
Project:	AKA Energy/Empire ABO	**Lab ID:**	1906239-02
Project No:	6-0141-11	**Collection Date:**	06/11/19 01:15 PM
Lab Order:	1906239	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0661	0.0661	0.132		mg/Kg-dry	1	06/24/19 01:12 PM
Aroclor 1221	<0.0661	0.0661	0.132		mg/Kg-dry	1	06/24/19 01:12 PM
Aroclor 1232	<0.0661	0.0661	0.132		mg/Kg-dry	1	06/24/19 01:12 PM
Aroclor 1242	<0.0661	0.0661	0.132		mg/Kg-dry	1	06/24/19 01:12 PM
Aroclor 1248	<0.0661	0.0661	0.132		mg/Kg-dry	1	06/24/19 01:12 PM
Aroclor 1254	1.97	0.0661	0.132		mg/Kg-dry	1	06/24/19 01:12 PM
Aroclor 1260	<0.0661	0.0661	0.132		mg/Kg-dry	1	06/24/19 01:12 PM
Total PCBs	1.97	0.0661	0.132		mg/Kg-dry	1	06/24/19 01:12 PM
Surr: Decachlorobiphenyl	52.2	0	58-125	S	%REC	1	06/24/19 01:12 PM
Surr: Tetrachloro-m-xylene	80.0	0	40-130		%REC	1	06/24/19 01:12 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	27.0	0	0		WT%	1	06/26/19 09:11 AM

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

DHL Analytical, Inc.

Date: *28-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	EA-10-S-3
Project:	AKA Energy/Empire ABO	**Lab ID:**	1906239-03
Project No:	6-0141-11	**Collection Date:**	06/11/19 01:20 PM
Lab Order:	1906239	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0539	0.0539	0.108		mg/Kg-dry	1	06/24/19 01:37 PM
Aroclor 1221	<0.0539	0.0539	0.108		mg/Kg-dry	1	06/24/19 01:37 PM
Aroclor 1232	<0.0539	0.0539	0.108		mg/Kg-dry	1	06/24/19 01:37 PM
Aroclor 1242	<0.0539	0.0539	0.108		mg/Kg-dry	1	06/24/19 01:37 PM
Aroclor 1248	<0.0539	0.0539	0.108		mg/Kg-dry	1	06/24/19 01:37 PM
Aroclor 1254	2.91	0.0539	0.108		mg/Kg-dry	1	06/24/19 01:37 PM
Aroclor 1260	<0.0539	0.0539	0.108		mg/Kg-dry	1	06/24/19 01:37 PM
Total PCBs	2.91	0.0539	0.108		mg/Kg-dry	1	06/24/19 01:37 PM
Surr: Decachlorobiphenyl	49.8	0	58-125	S	%REC	1	06/24/19 01:37 PM
Surr: Tetrachloro-m-xylene	95.2	0	40-130		%REC	1	06/24/19 01:37 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	8.00	0	0		WT%	1	06/26/19 09:11 AM

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

DHL Analytical, Inc. **Date:** *28-Jun-19*

CLIENT: Larson & Associates
Work Order: 1906239
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190624A

The QC data in batch 91449 applies to the following samples: 1906239-01A, 1906239-02A, 1906239-03A

Sample ID **LCS-91449** Batch ID: **91449** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_190624A** Analysis Date: **6/24/2019 9:21:00 AM** Prep Date: **6/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.912	0.100	1.000	0	91.2	41	138			
Aroclor 1260	0.855	0.100	1.000	0	85.5	61	131			
Surr: Decachlorobiphenyl	0.0753		0.1000		75.3	58	125			
Surr: Tetrachloro-m-xylene	0.0944		0.1000		94.4	40	130			

Sample ID **MB-91449** Batch ID: **91449** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_190624A** Analysis Date: **6/24/2019 9:47:00 AM** Prep Date: **6/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0922		0.1000		92.2	58	125			
Surr: Tetrachloro-m-xylene	0.0994		0.1000		99.4	40	130			

Sample ID **1906233-01CMS** Batch ID: **91449** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC16_190624A** Analysis Date: **6/24/2019 2:03:00 PM** Prep Date: **6/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.952	0.118	1.181	0	80.6	41	138			
Aroclor 1260	0.718	0.118	1.181	0	60.8	61	131			
Surr: Decachlorobiphenyl	0.0681		0.1181		57.7	58	125			
Surr: Tetrachloro-m-xylene	0.108		0.1181		91.7	40	130			

Sample ID **1906233-01CMSD** Batch ID: **91449** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC16_190624A** Analysis Date: **6/24/2019 2:28:00 PM** Prep Date: **6/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.864	0.118	1.183	0	73.0	41	138	9.72	50	
Aroclor 1260	0.683	0.118	1.183	0	57.7	61	131	5.01	50	S
Surr: Decachlorobiphenyl	0.0637		0.1183		53.8	58	125	0		S
Surr: Tetrachloro-m-xylene	0.0917		0.1183		77.5	40	130	0		

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

CLIENT: Larson & Associates
Work Order: 1906239
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190625A**

The QC data in batch 91496 applies to the following samples: 1906239-01A, 1906239-02A, 1906239-03A

Sample ID **1906254-05A-DUP** Batch ID: **91496** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190625A** Analysis Date: **6/26/2019 9:11:00 AM** Prep Date: **6/25/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	22.3	0	0	22.38				0.398	30	

Qualifiers:

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

July 16, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1907017

RE: Empire ABO/EA-10

Dear Mark Larson:

DHL Analytical, Inc. received 39 sample(s) on 7/2/2019 for the analyses presented in the following report.

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

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

Sincerely,

John DuPont
General Manager

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

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№ 0292

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-28-2019 PAGE 1 OF 3

PO#: LAB WORK ORDER#: 1907017

PROJECT LOCATION OR NAME: Empire ABO / EA-10

LAI PROJECT #: 6-014-11 COLLECTOR: ML / BN

TRRP report? ☐ Yes ☐ No

TIME ZONE: Time zone/State: MTN / NM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
10-01-0-1.3'	01	6/26/19	10:00	S	1				X		8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐	
10-01-2-3'	02		10:05		1							
10-01-4-5.25'	03		10:15		1							
10-01-6-6.25'	04		10:30		1							
10-01-8-8.5'	05		10:40		1							
10-02-0-0.5'	06		11:23		1							
10-02-2-3'	07		11:29		1							
10-02-4-4.5'	08		11:36		1							
10-02-6.7'	09		11:37		1							
10-03-0-1.5'	10		12:46		1							
10-03-2-2.25'	11		12:54		1							
10-03-4-4.25'	12		13:00		1							
10-04-0-1'	13		13:17		1							
10-09-2-2.25'	14		13:25		1							
10-04-4-5'	15	↓	13:35	↓	1				↓			
TOTAL					15							

RELINQUISHED BY:(Signature) DATE/TIME 6/28/19 7/1/19 08:00 RECEIVED BY: (Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 7.2.19 0810 RECEIVED BY: (Signature)

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

LABORATORY: DHL

3

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 4.2 THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

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Received by OCD: 4/3/2023 2:46:30 PM

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№ 0293

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 205
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-28-19 PAGE 2 OF 3
PO#: LAB WORK ORDER#: 1907017
PROJECT LOCATION OR NAME: Empire ABO / Ea 10
LAI PROJECT #: 6-0141-11 COLLECTOR: ML / RW

TRRP report? ☐ Yes ☑ No
TIME ZONE: Time zone/State: Mtn / NM
S=SOIL P=PAINT W=WATER SL=SLUDGE A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
10-05-0-1'	16	6/26/19	14:12	S	1				X			
10-05-2-3'	17		14:19		1							
10-05-4-4.5'	18		14:23		1							
10-05-6-6.75	19		14:31		1							
10-05-8-9.5'	20		14:44		1							
10-05-8.5-10'	21	↓	14:49		1							
10-21-0-1.5'	22	6/28/19	08:01		1							
10-21-2-2.5'	23		08:07		1							
10-21-4-4.25'	24		08:09		1							
10-22-0-1'	25		08:14		1							
10-22-2-2.25'	26		08:15		1							
10-22-4-5'	27		08:22		1							
10-23-0-1'	28		08:35		1							
10-23-2-2.25'	29		08:40		1							
10-23-4-4.25'	30	↓	08:49	↓	1				↓			
TOTAL					15							

ANALYSES: BTEX ☐ MTBE ☐ TPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐ TCLP - METALS (RCRA) ☐ TCLP VOC ☐ TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ TOTAL METALS (RCRA) ☐ OTHER LIST ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐

RELINQUISHED BY:(Signature) DATE/TIME 6/28/19 7/1/19 08:00 RECEIVED BY: (Signature) LSO
RELINQUISHED BY:(Signature) LSO DATE/TIME 7-2-19 08:10 RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)
LABORATORY: HL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 4.2 THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

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Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

№ 0294

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-28-2019 PAGE 3 OF 3
PO#: LAB WORK ORDER#: 1907017
PROJECT LOCATION OR NAME: Empire Abo/Ea-10
LAI PROJECT #: 6-0141-11 COLLECTOR: ML/RM

TRRP report? ☐ Yes ☑ No
TIME ZONE: Time zone/State: Mtn/NM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES
10-24-0-1.5'	31	6/29/19	08:58	S	1				X		
10-24-2-2.5'	32		09:01		1						
10-25-0-1.5'	33		09:22		1						
10-25-2-3'	34		09:26		1						
10-26-0-1.5'	35		09:38		1						
10-26-2-2.5'	36		09:41		1						
10-27-0-1.5'	37		09:51		1						
10-27-2-2.5'	38		09:53		1						
10-27-4-4.5'	39		09:55		1						
Thrm Comp	—	↓	10:45	↓	1				↓		
TOTAL					10						

ANALYSES: BTEX ☐ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☐ | DIESEL - MOD 8015 ☐ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐ | FIELD NOTES

RELINQUISHED BY:(Signature) DATE/TIME July 1, 2019 08:00 RECEIVED BY: (Signature) LSO
RELINQUISHED BY:(Signature) LSO DATE/TIME 7-2-19 08:10 RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)
LABORATORY: DHL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 4.2 THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

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LSO

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LSO0BYFW

1. To: Print Name (Person) / Phone (Important)

Company Name

Street Address (No P.O. Box or P.O. Box Zip Code for Deliveries)

Suite / Floor

City / State / Zip

2. From: Print Name (Person) / Phone (Important)

Company Name

Street Address

Suite / Floor

City / State / Zip

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- ☐ **LSO Ground**
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Ship Date: (mm/dd/yy) 07 / 01 / 19

5. Payment:

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Driver Number _____

☐ Check here if LSO Supplies are used with LSO Ground Service.

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Date: _____

Time: _____

City Code:

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. **NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY.** See LSO Service Guide for further details.

CUSTODY SEAL
DATE 7/1/2019
SIGNATURE

QEC
Quality Environmental Containers
800-255-3950 • 304-255-3900

Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates Date Received: 7/2/2019

Work Order Number 1907017 Received by CC

Checklist completed by: _____ 7/2/2019 Reviewed by DL 7/2/2019
Signature Date Initials Date

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	4.2 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

DHL Analytical, Inc. **Date:** *16-Jul-19*

CLIENT: Larson & Associates
Project: Empire ABO/EA-10
Lab Order: 1907017

CASE NARRATIVE

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

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

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For PCB Analysis, the recoveries of various surrogates for four samples are outside of the method control limits, due to matrix/dilutions. Additionally, the recovery of surrogate Decachlorobiphenyl for the Matrix Spike (1907012-39 MS) was below the method control limits. These are flagged accordingly in the Analytical Data Report and the QC Summary Report. No further corrective action was taken.

For PCB Analysis, for Batch 91695, the recovery of Aroclor 1260 for the Matrix Spike and Matrix Spike Duplicate (1907017-01 MS/MSD) was above the method control limits. This is flagged accordingly in the QC Summary Report. This aroclor was within method control limits in the associated LCS. No further corrective action was taken.

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-01-0-1.3'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-01
Project No:	6-0141-11	**Collection Date:**	06/26/19 10:00 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/10/19 02:26 PM
Aroclor 1221	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/10/19 02:26 PM
Aroclor 1232	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/10/19 02:26 PM
Aroclor 1242	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/10/19 02:26 PM
Aroclor 1248	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/10/19 02:26 PM
Aroclor 1254	5.03	0.603	1.21		mg/Kg-dry	10	07/12/19 09:41 AM
Aroclor 1260	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/10/19 02:26 PM
Total PCBs	5.03	0.603	1.21		mg/Kg-dry	10	07/12/19 09:41 AM
Surr: Decachlorobiphenyl	78.7	0	58-125		%REC	10	07/12/19 09:41 AM
Surr: Decachlorobiphenyl	78.0	0	58-125		%REC	1	07/10/19 02:26 PM
Surr: Tetrachloro-m-xylene	86.6	0	40-130		%REC	10	07/12/19 09:41 AM
Surr: Tetrachloro-m-xylene	83.6	0	40-130		%REC	1	07/10/19 02:26 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	20.6	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-01-2-3'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-02
Project No:	6-0141-11	**Collection Date:**	06/26/19 10:05 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/10/19 02:51 PM
Aroclor 1221	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/10/19 02:51 PM
Aroclor 1232	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/10/19 02:51 PM
Aroclor 1242	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/10/19 02:51 PM
Aroclor 1248	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/10/19 02:51 PM
Aroclor 1254	10.7	0.554	1.11		mg/Kg-dry	10	07/12/19 10:07 AM
Aroclor 1260	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/10/19 02:51 PM
Total PCBs	10.7	0.554	1.11		mg/Kg-dry	10	07/12/19 10:07 AM
Surr: Decachlorobiphenyl	99.6	0	58-125		%REC	10	07/12/19 10:07 AM
Surr: Decachlorobiphenyl	86.6	0	58-125		%REC	1	07/10/19 02:51 PM
Surr: Tetrachloro-m-xylene	96.4	0	40-130		%REC	10	07/12/19 10:07 AM
Surr: Tetrachloro-m-xylene	84.2	0	40-130		%REC	1	07/10/19 02:51 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	11.8	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-01-4-5.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-03
Project No:	6-0141-11	**Collection Date:**	06/26/19 10:15 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0523	0.0523	0.105		mg/Kg-dry	1	07/10/19 03:17 PM
Aroclor 1221	<0.0523	0.0523	0.105		mg/Kg-dry	1	07/10/19 03:17 PM
Aroclor 1232	<0.0523	0.0523	0.105		mg/Kg-dry	1	07/10/19 03:17 PM
Aroclor 1242	<0.0523	0.0523	0.105		mg/Kg-dry	1	07/10/19 03:17 PM
Aroclor 1248	<0.0523	0.0523	0.105		mg/Kg-dry	1	07/10/19 03:17 PM
Aroclor 1254	0.318	0.0523	0.105		mg/Kg-dry	1	07/10/19 03:17 PM
Aroclor 1260	<0.0523	0.0523	0.105		mg/Kg-dry	1	07/10/19 03:17 PM
Total PCBs	0.318	0.0523	0.105		mg/Kg-dry	1	07/10/19 03:17 PM
Surr: Decachlorobiphenyl	92.7	0	58-125		%REC	1	07/10/19 03:17 PM
Surr: Tetrachloro-m-xylene	81.2	0	40-130		%REC	1	07/10/19 03:17 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	7.73	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-01-6-6.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-04
Project No:	6-0141-11	**Collection Date:**	06/26/19 10:30 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0600	0.0600	0.120		mg/Kg-dry	1	07/10/19 03:42 PM
Aroclor 1221	<0.0600	0.0600	0.120		mg/Kg-dry	1	07/10/19 03:42 PM
Aroclor 1232	<0.0600	0.0600	0.120		mg/Kg-dry	1	07/10/19 03:42 PM
Aroclor 1242	<0.0600	0.0600	0.120		mg/Kg-dry	1	07/10/19 03:42 PM
Aroclor 1248	<0.0600	0.0600	0.120		mg/Kg-dry	1	07/10/19 03:42 PM
Aroclor 1254	<0.0600	0.0600	0.120		mg/Kg-dry	1	07/10/19 03:42 PM
Aroclor 1260	<0.0600	0.0600	0.120		mg/Kg-dry	1	07/10/19 03:42 PM
Total PCBs	<0.0600	0.0600	0.120		mg/Kg-dry	1	07/10/19 03:42 PM
Surr: Decachlorobiphenyl	86.9	0	58-125		%REC	1	07/10/19 03:42 PM
Surr: Tetrachloro-m-xylene	76.7	0	40-130		%REC	1	07/10/19 03:42 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.9	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-01-8-8.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-05
Project No:	6-0141-11	**Collection Date:**	06/26/19 10:40 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/10/19 04:07 PM
Aroclor 1221	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/10/19 04:07 PM
Aroclor 1232	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/10/19 04:07 PM
Aroclor 1242	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/10/19 04:07 PM
Aroclor 1248	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/10/19 04:07 PM
Aroclor 1254	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/10/19 04:07 PM
Aroclor 1260	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/10/19 04:07 PM
Total PCBs	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/10/19 04:07 PM
Surr: Decachlorobiphenyl	94.3	0	58-125		%REC	1	07/10/19 04:07 PM
Surr: Tetrachloro-m-xylene	83.5	0	40-130		%REC	1	07/10/19 04:07 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	20.1	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-02-0-0.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-06
Project No:	6-0141-11	**Collection Date:**	06/26/19 11:23 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 04:33 PM
Aroclor 1221	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 04:33 PM
Aroclor 1232	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 04:33 PM
Aroclor 1242	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 04:33 PM
Aroclor 1248	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 04:33 PM
Aroclor 1254	168	12.2	24.3		mg/Kg-dry	200	07/12/19 10:32 AM
Aroclor 1260	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 04:33 PM
Total PCBs	168	12.2	24.3		mg/Kg-dry	200	07/12/19 10:32 AM
Surr: Decachlorobiphenyl	1460000	0	58-125	S	%REC	200	07/12/19 10:32 AM
Surr: Decachlorobiphenyl	151	0	58-125	S	%REC	1	07/10/19 04:33 PM
Surr: Tetrachloro-m-xylene	103	0	40-130		%REC	200	07/12/19 10:32 AM
Surr: Tetrachloro-m-xylene	83.6	0	40-130		%REC	1	07/10/19 04:33 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	21.5	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-02-2-3'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-07
Project No:	6-0141-11	**Collection Date:**	06/26/19 11:29 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0575	0.0575	0.115		mg/Kg-dry	1	07/10/19 04:58 PM
Aroclor 1221	<0.0575	0.0575	0.115		mg/Kg-dry	1	07/10/19 04:58 PM
Aroclor 1232	<0.0575	0.0575	0.115		mg/Kg-dry	1	07/10/19 04:58 PM
Aroclor 1242	<0.0575	0.0575	0.115		mg/Kg-dry	1	07/10/19 04:58 PM
Aroclor 1248	<0.0575	0.0575	0.115		mg/Kg-dry	1	07/10/19 04:58 PM
Aroclor 1254	85.6	5.75	11.5		mg/Kg-dry	100	07/12/19 10:58 AM
Aroclor 1260	<0.0575	0.0575	0.115		mg/Kg-dry	1	07/10/19 04:58 PM
Total PCBs	85.6	5.75	11.5		mg/Kg-dry	100	07/12/19 10:58 AM
Surr: Decachlorobiphenyl	729000	0	58-125	S	%REC	100	07/12/19 10:58 AM
Surr: Decachlorobiphenyl	83.9	0	58-125		%REC	1	07/10/19 04:58 PM
Surr: Tetrachloro-m-xylene	100	0	40-130		%REC	100	07/12/19 10:58 AM
Surr: Tetrachloro-m-xylene	79.2	0	40-130		%REC	1	07/10/19 04:58 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.5	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-02-4-4.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-08
Project No:	6-0141-11	**Collection Date:**	06/26/19 11:36 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/10/19 05:24 PM
Aroclor 1221	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/10/19 05:24 PM
Aroclor 1232	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/10/19 05:24 PM
Aroclor 1242	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/10/19 05:24 PM
Aroclor 1248	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/10/19 05:24 PM
Aroclor 1254	34.6	1.22	2.44		mg/Kg-dry	20	07/12/19 11:23 AM
Aroclor 1260	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/10/19 05:24 PM
Total PCBs	34.6	1.22	2.44		mg/Kg-dry	20	07/12/19 11:23 AM
Surr: Decachlorobiphenyl	75.8	0	58-125		%REC	20	07/12/19 11:23 AM
Surr: Decachlorobiphenyl	99.2	0	58-125		%REC	1	07/10/19 05:24 PM
Surr: Tetrachloro-m-xylene	96.8	0	40-130		%REC	20	07/12/19 11:23 AM
Surr: Tetrachloro-m-xylene	84.3	0	40-130		%REC	1	07/10/19 05:24 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.2	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-02-6-7'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-09
Project No:	6-0141-11	**Collection Date:**	06/26/19 11:37 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 05:49 PM
Aroclor 1221	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 05:49 PM
Aroclor 1232	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 05:49 PM
Aroclor 1242	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 05:49 PM
Aroclor 1248	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 05:49 PM
Aroclor 1254	24.2	0.597	1.19		mg/Kg-dry	10	07/12/19 11:48 AM
Aroclor 1260	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 05:49 PM
Total PCBs	24.2	0.597	1.19		mg/Kg-dry	10	07/12/19 11:48 AM
Surr: Decachlorobiphenyl	76.3	0	58-125		%REC	10	07/12/19 11:48 AM
Surr: Decachlorobiphenyl	97.8	0	58-125		%REC	1	07/10/19 05:49 PM
Surr: Tetrachloro-m-xylene	86.1	0	40-130		%REC	10	07/12/19 11:48 AM
Surr: Tetrachloro-m-xylene	84.0	0	40-130		%REC	1	07/10/19 05:49 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	17.4	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-03-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-10
Project No:	6-0141-11	**Collection Date:**	06/26/19 12:46 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0504	0.0504	0.101		mg/Kg-dry	1	07/10/19 06:14 PM
Aroclor 1221	<0.0504	0.0504	0.101		mg/Kg-dry	1	07/10/19 06:14 PM
Aroclor 1232	<0.0504	0.0504	0.101		mg/Kg-dry	1	07/10/19 06:14 PM
Aroclor 1242	<0.0504	0.0504	0.101		mg/Kg-dry	1	07/10/19 06:14 PM
Aroclor 1248	<0.0504	0.0504	0.101		mg/Kg-dry	1	07/10/19 06:14 PM
Aroclor 1254	5.80	0.252	0.504		mg/Kg-dry	5	07/12/19 12:14 PM
Aroclor 1260	<0.0504	0.0504	0.101		mg/Kg-dry	1	07/10/19 06:14 PM
Total PCBs	5.80	0.252	0.504		mg/Kg-dry	5	07/12/19 12:14 PM
Surr: Decachlorobiphenyl	84.5	0	58-125		%REC	5	07/12/19 12:14 PM
Surr: Decachlorobiphenyl	94.7	0	58-125		%REC	1	07/10/19 06:14 PM
Surr: Tetrachloro-m-xylene	82.1	0	40-130		%REC	5	07/12/19 12:14 PM
Surr: Tetrachloro-m-xylene	80.6	0	40-130		%REC	1	07/10/19 06:14 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	9.19	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-03-2-2.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-11
Project No:	6-0141-11	**Collection Date:**	06/26/19 12:54 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0553	0.0553	0.111		mg/Kg-dry	1	07/10/19 07:56 PM
Aroclor 1221	<0.0553	0.0553	0.111		mg/Kg-dry	1	07/10/19 07:56 PM
Aroclor 1232	<0.0553	0.0553	0.111		mg/Kg-dry	1	07/10/19 07:56 PM
Aroclor 1242	<0.0553	0.0553	0.111		mg/Kg-dry	1	07/10/19 07:56 PM
Aroclor 1248	<0.0553	0.0553	0.111		mg/Kg-dry	1	07/10/19 07:56 PM
Aroclor 1254	3.33	0.0553	0.111		mg/Kg-dry	1	07/10/19 07:56 PM
Aroclor 1260	<0.0553	0.0553	0.111		mg/Kg-dry	1	07/10/19 07:56 PM
Total PCBs	3.33	0.0553	0.111		mg/Kg-dry	1	07/10/19 07:56 PM
Surr: Decachlorobiphenyl	75.4	0	58-125		%REC	1	07/10/19 07:56 PM
Surr: Tetrachloro-m-xylene	73.4	0	40-130		%REC	1	07/10/19 07:56 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	12.9	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-03-4-4.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-12
Project No:	6-0141-11	**Collection Date:**	06/26/19 01:00 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0586	0.0586	0.117		mg/Kg-dry	1	07/10/19 08:21 PM
Aroclor 1221	<0.0586	0.0586	0.117		mg/Kg-dry	1	07/10/19 08:21 PM
Aroclor 1232	<0.0586	0.0586	0.117		mg/Kg-dry	1	07/10/19 08:21 PM
Aroclor 1242	<0.0586	0.0586	0.117		mg/Kg-dry	1	07/10/19 08:21 PM
Aroclor 1248	<0.0586	0.0586	0.117		mg/Kg-dry	1	07/10/19 08:21 PM
Aroclor 1254	<0.0586	0.0586	0.117		mg/Kg-dry	1	07/10/19 08:21 PM
Aroclor 1260	<0.0586	0.0586	0.117		mg/Kg-dry	1	07/10/19 08:21 PM
Total PCBs	<0.0586	0.0586	0.117		mg/Kg-dry	1	07/10/19 08:21 PM
Surr: Decachlorobiphenyl	87.1	0	58-125		%REC	1	07/10/19 08:21 PM
Surr: Tetrachloro-m-xylene	79.9	0	40-130		%REC	1	07/10/19 08:21 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	20.4	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-04-0-1'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-13
Project No:	6-0141-11	**Collection Date:**	06/26/19 01:17 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/10/19 08:46 PM
Aroclor 1221	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/10/19 08:46 PM
Aroclor 1232	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/10/19 08:46 PM
Aroclor 1242	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/10/19 08:46 PM
Aroclor 1248	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/10/19 08:46 PM
Aroclor 1254	1.83	0.0612	0.122		mg/Kg-dry	1	07/10/19 08:46 PM
Aroclor 1260	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/10/19 08:46 PM
Total PCBs	1.83	0.0612	0.122		mg/Kg-dry	1	07/10/19 08:46 PM
Surr: Decachlorobiphenyl	88.0	0	58-125		%REC	1	07/10/19 08:46 PM
Surr: Tetrachloro-m-xylene	82.3	0	40-130		%REC	1	07/10/19 08:46 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.6	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-04-2-2.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-14
Project No:	6-0141-11	**Collection Date:**	06/26/19 01:28 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0602	0.0602	0.120		mg/Kg-dry	1	07/10/19 09:12 PM
Aroclor 1221	<0.0602	0.0602	0.120		mg/Kg-dry	1	07/10/19 09:12 PM
Aroclor 1232	<0.0602	0.0602	0.120		mg/Kg-dry	1	07/10/19 09:12 PM
Aroclor 1242	<0.0602	0.0602	0.120		mg/Kg-dry	1	07/10/19 09:12 PM
Aroclor 1248	<0.0602	0.0602	0.120		mg/Kg-dry	1	07/10/19 09:12 PM
Aroclor 1254	0.0697	0.0602	0.120	J	mg/Kg-dry	1	07/10/19 09:12 PM
Aroclor 1260	<0.0602	0.0602	0.120		mg/Kg-dry	1	07/10/19 09:12 PM
Total PCBs	0.0697	0.0602	0.120	J	mg/Kg-dry	1	07/10/19 09:12 PM
Surr: Decachlorobiphenyl	92.1	0	58-125		%REC	1	07/10/19 09:12 PM
Surr: Tetrachloro-m-xylene	77.1	0	40-130		%REC	1	07/10/19 09:12 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.5	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-04-4-5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-15
Project No:	6-0141-11	**Collection Date:**	06/26/19 01:35 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/10/19 09:37 PM
Aroclor 1221	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/10/19 09:37 PM
Aroclor 1232	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/10/19 09:37 PM
Aroclor 1242	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/10/19 09:37 PM
Aroclor 1248	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/10/19 09:37 PM
Aroclor 1254	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/10/19 09:37 PM
Aroclor 1260	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/10/19 09:37 PM
Total PCBs	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/10/19 09:37 PM
Surr: Decachlorobiphenyl	88.0	0	58-125		%REC	1	07/10/19 09:37 PM
Surr: Tetrachloro-m-xylene	79.2	0	40-130		%REC	1	07/10/19 09:37 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	20.1	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-05-0-1'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-16
Project No:	6-0141-11	**Collection Date:**	06/26/19 02:12 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:02 PM
Aroclor 1221	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:02 PM
Aroclor 1232	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:02 PM
Aroclor 1242	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:02 PM
Aroclor 1248	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:02 PM
Aroclor 1254	0.210	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:02 PM
Aroclor 1260	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:02 PM
Total PCBs	0.210	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:02 PM
Surr: Decachlorobiphenyl	83.6	0	58-125		%REC	1	07/10/19 10:02 PM
Surr: Tetrachloro-m-xylene	77.1	0	40-130		%REC	1	07/10/19 10:02 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	20.2	0	0		WT%	1	07/10/19 08:30 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-05-2-3'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-17
Project No:	6-0141-11	**Collection Date:**	06/26/19 02:19 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:28 PM
Aroclor 1221	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:28 PM
Aroclor 1232	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:28 PM
Aroclor 1242	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:28 PM
Aroclor 1248	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:28 PM
Aroclor 1254	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:28 PM
Aroclor 1260	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:28 PM
Total PCBs	<0.0597	0.0597	0.119		mg/Kg-dry	1	07/10/19 10:28 PM
Surr: Decachlorobiphenyl	91.0	0	58-125		%REC	1	07/10/19 10:28 PM
Surr: Tetrachloro-m-xylene	80.2	0	40-130		%REC	1	07/10/19 10:28 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	17.8	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-05-4-4.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-18
Project No:	6-0141-11	**Collection Date:**	06/26/19 02:23 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/10/19 10:53 PM
Aroclor 1221	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/10/19 10:53 PM
Aroclor 1232	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/10/19 10:53 PM
Aroclor 1242	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/10/19 10:53 PM
Aroclor 1248	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/10/19 10:53 PM
Aroclor 1254	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/10/19 10:53 PM
Aroclor 1260	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/10/19 10:53 PM
Total PCBs	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/10/19 10:53 PM
Surr: Decachlorobiphenyl	83.3	0	58-125		%REC	1	07/10/19 10:53 PM
Surr: Tetrachloro-m-xylene	72.9	0	40-130		%REC	1	07/10/19 10:53 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	18.6	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-05-6-6.75'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-19
Project No:	6-0141-11	**Collection Date:**	06/26/19 02:31 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 11:18 PM
Aroclor 1221	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 11:18 PM
Aroclor 1232	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 11:18 PM
Aroclor 1242	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 11:18 PM
Aroclor 1248	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 11:18 PM
Aroclor 1254	0.115	0.0608	0.122	J	mg/Kg-dry	1	07/10/19 11:18 PM
Aroclor 1260	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/10/19 11:18 PM
Total PCBs	0.115	0.0608	0.122	J	mg/Kg-dry	1	07/10/19 11:18 PM
Surr: Decachlorobiphenyl	90.8	0	58-125		%REC	1	07/10/19 11:18 PM
Surr: Tetrachloro-m-xylene	80.7	0	40-130		%REC	1	07/10/19 11:18 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.6	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-05-8-8.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-20
Project No:	6-0141-11	**Collection Date:**	06/26/19 02:44 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/11/19 09:51 AM
Aroclor 1221	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/11/19 09:51 AM
Aroclor 1232	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/11/19 09:51 AM
Aroclor 1242	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/11/19 09:51 AM
Aroclor 1248	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/11/19 09:51 AM
Aroclor 1254	0.300	0.0588	0.118		mg/Kg-dry	1	07/11/19 09:51 AM
Aroclor 1260	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/11/19 09:51 AM
Total PCBs	0.300	0.0588	0.118		mg/Kg-dry	1	07/11/19 09:51 AM
Surr: Decachlorobiphenyl	53.1	0	58-125	S	%REC	1	07/11/19 09:51 AM
Surr: Tetrachloro-m-xylene	62.6	0	40-130		%REC	1	07/11/19 09:51 AM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	17.9	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-05-8.5-10'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-21
Project No:	6-0141-11	**Collection Date:**	06/26/19 02:49 PM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0578	0.0578	0.116		mg/Kg-dry	1	07/11/19 10:17 AM
Aroclor 1221	<0.0578	0.0578	0.116		mg/Kg-dry	1	07/11/19 10:17 AM
Aroclor 1232	<0.0578	0.0578	0.116		mg/Kg-dry	1	07/11/19 10:17 AM
Aroclor 1242	<0.0578	0.0578	0.116		mg/Kg-dry	1	07/11/19 10:17 AM
Aroclor 1248	<0.0578	0.0578	0.116		mg/Kg-dry	1	07/11/19 10:17 AM
Aroclor 1254	<0.0578	0.0578	0.116		mg/Kg-dry	1	07/11/19 10:17 AM
Aroclor 1260	<0.0578	0.0578	0.116		mg/Kg-dry	1	07/11/19 10:17 AM
Total PCBs	<0.0578	0.0578	0.116		mg/Kg-dry	1	07/11/19 10:17 AM
Surr: Decachlorobiphenyl	82.8	0	58-125		%REC	1	07/11/19 10:17 AM
Surr: Tetrachloro-m-xylene	74.8	0	40-130		%REC	1	07/11/19 10:17 AM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.4	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-21-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-22
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:01 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0537	0.0537	0.107		mg/Kg-dry	1	07/11/19 01:39 PM
Aroclor 1221	<0.0537	0.0537	0.107		mg/Kg-dry	1	07/11/19 01:39 PM
Aroclor 1232	<0.0537	0.0537	0.107		mg/Kg-dry	1	07/11/19 01:39 PM
Aroclor 1242	<0.0537	0.0537	0.107		mg/Kg-dry	1	07/11/19 01:39 PM
Aroclor 1248	<0.0537	0.0537	0.107		mg/Kg-dry	1	07/11/19 01:39 PM
Aroclor 1254	0.0672	0.0537	0.107	J	mg/Kg-dry	1	07/11/19 01:39 PM
Aroclor 1260	<0.0537	0.0537	0.107		mg/Kg-dry	1	07/11/19 01:39 PM
Total PCBs	0.0672	0.0537	0.107	J	mg/Kg-dry	1	07/11/19 01:39 PM
Surr: Decachlorobiphenyl	73.1	0	58-125		%REC	1	07/11/19 01:39 PM
Surr: Tetrachloro-m-xylene	69.5	0	40-130		%REC	1	07/11/19 01:39 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	9.70	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-21-2-2.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-23
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:07 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 02:04 PM
Aroclor 1221	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 02:04 PM
Aroclor 1232	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 02:04 PM
Aroclor 1242	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 02:04 PM
Aroclor 1248	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 02:04 PM
Aroclor 1254	0.137	0.0596	0.119		mg/Kg-dry	1	07/11/19 02:04 PM
Aroclor 1260	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 02:04 PM
Total PCBs	0.137	0.0596	0.119		mg/Kg-dry	1	07/11/19 02:04 PM
Surr: Decachlorobiphenyl	81.8	0	58-125		%REC	1	07/11/19 02:04 PM
Surr: Tetrachloro-m-xylene	79.4	0	40-130		%REC	1	07/11/19 02:04 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.6	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-21-4-4.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-24
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:09 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/11/19 02:30 PM
Aroclor 1221	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/11/19 02:30 PM
Aroclor 1232	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/11/19 02:30 PM
Aroclor 1242	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/11/19 02:30 PM
Aroclor 1248	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/11/19 02:30 PM
Aroclor 1254	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/11/19 02:30 PM
Aroclor 1260	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/11/19 02:30 PM
Total PCBs	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/11/19 02:30 PM
Surr: Decachlorobiphenyl	98.9	0	58-125		%REC	1	07/11/19 02:30 PM
Surr: Tetrachloro-m-xylene	87.5	0	40-130		%REC	1	07/11/19 02:30 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.6	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-22-0-1'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-25
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:14 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0551	0.0551	0.110		mg/Kg-dry	1	07/11/19 02:55 PM
Aroclor 1221	<0.0551	0.0551	0.110		mg/Kg-dry	1	07/11/19 02:55 PM
Aroclor 1232	<0.0551	0.0551	0.110		mg/Kg-dry	1	07/11/19 02:55 PM
Aroclor 1242	<0.0551	0.0551	0.110		mg/Kg-dry	1	07/11/19 02:55 PM
Aroclor 1248	<0.0551	0.0551	0.110		mg/Kg-dry	1	07/11/19 02:55 PM
Aroclor 1254	160	27.6	55.1		mg/Kg-dry	500	07/12/19 02:20 PM
Aroclor 1260	<0.0551	0.0551	0.110		mg/Kg-dry	1	07/11/19 02:55 PM
Total PCBs	160	27.6	55.1		mg/Kg-dry	500	07/12/19 02:20 PM
Surr: Decachlorobiphenyl	3650000	0	58-125	S	%REC	500	07/12/19 02:20 PM
Surr: Decachlorobiphenyl	71.1	0	58-125		%REC	1	07/11/19 02:55 PM
Surr: Tetrachloro-m-xylene	211	0	40-130	S	%REC	500	07/12/19 02:20 PM
Surr: Tetrachloro-m-xylene	78.2	0	40-130		%REC	1	07/11/19 02:55 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	15.1	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-22-2-2.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-26
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:15 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 03:21 PM
Aroclor 1221	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 03:21 PM
Aroclor 1232	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 03:21 PM
Aroclor 1242	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 03:21 PM
Aroclor 1248	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 03:21 PM
Aroclor 1254	0.838	0.0603	0.121		mg/Kg-dry	1	07/11/19 03:21 PM
Aroclor 1260	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 03:21 PM
Total PCBs	0.838	0.0603	0.121		mg/Kg-dry	1	07/11/19 03:21 PM
Surr: Decachlorobiphenyl	96.2	0	58-125		%REC	1	07/11/19 03:21 PM
Surr: Tetrachloro-m-xylene	87.0	0	40-130		%REC	1	07/11/19 03:21 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	20.4	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-22-4-5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-27
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:22 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0592	0.0592	0.118		mg/Kg-dry	1	07/11/19 03:46 PM
Aroclor 1221	<0.0592	0.0592	0.118		mg/Kg-dry	1	07/11/19 03:46 PM
Aroclor 1232	<0.0592	0.0592	0.118		mg/Kg-dry	1	07/11/19 03:46 PM
Aroclor 1242	<0.0592	0.0592	0.118		mg/Kg-dry	1	07/11/19 03:46 PM
Aroclor 1248	<0.0592	0.0592	0.118		mg/Kg-dry	1	07/11/19 03:46 PM
Aroclor 1254	5.11	0.0592	0.118		mg/Kg-dry	1	07/11/19 03:46 PM
Aroclor 1260	<0.0592	0.0592	0.118		mg/Kg-dry	1	07/11/19 03:46 PM
Total PCBs	5.11	0.0592	0.118		mg/Kg-dry	1	07/11/19 03:46 PM
Surr: Decachlorobiphenyl	86.2	0	58-125		%REC	1	07/11/19 03:46 PM
Surr: Tetrachloro-m-xylene	86.3	0	40-130		%REC	1	07/11/19 03:46 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.8	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-23-0-1'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-28
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:35 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 05:27 PM
Aroclor 1221	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 05:27 PM
Aroclor 1232	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 05:27 PM
Aroclor 1242	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 05:27 PM
Aroclor 1248	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 05:27 PM
Aroclor 1254	0.142	0.0519	0.104		mg/Kg-dry	1	07/11/19 05:27 PM
Aroclor 1260	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 05:27 PM
Total PCBs	0.142	0.0519	0.104		mg/Kg-dry	1	07/11/19 05:27 PM
Surr: Decachlorobiphenyl	65.4	0	58-125		%REC	1	07/11/19 05:27 PM
Surr: Tetrachloro-m-xylene	69.2	0	40-130		%REC	1	07/11/19 05:27 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	10.6	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-23-2-2.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-29
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:40 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0601	0.0601	0.120		mg/Kg-dry	1	07/11/19 05:53 PM
Aroclor 1221	<0.0601	0.0601	0.120		mg/Kg-dry	1	07/11/19 05:53 PM
Aroclor 1232	<0.0601	0.0601	0.120		mg/Kg-dry	1	07/11/19 05:53 PM
Aroclor 1242	<0.0601	0.0601	0.120		mg/Kg-dry	1	07/11/19 05:53 PM
Aroclor 1248	<0.0601	0.0601	0.120		mg/Kg-dry	1	07/11/19 05:53 PM
Aroclor 1254	0.553	0.0601	0.120		mg/Kg-dry	1	07/11/19 05:53 PM
Aroclor 1260	<0.0601	0.0601	0.120		mg/Kg-dry	1	07/11/19 05:53 PM
Total PCBs	0.553	0.0601	0.120		mg/Kg-dry	1	07/11/19 05:53 PM
Surr: Decachlorobiphenyl	92.4	0	58-125		%REC	1	07/11/19 05:53 PM
Surr: Tetrachloro-m-xylene	84.1	0	40-130		%REC	1	07/11/19 05:53 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.1	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-23-4-4.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-30
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:43 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/12/19 04:52 PM
Aroclor 1221	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/12/19 04:52 PM
Aroclor 1232	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/12/19 04:52 PM
Aroclor 1242	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/12/19 04:52 PM
Aroclor 1248	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/12/19 04:52 PM
Aroclor 1254	1.44	0.0603	0.121		mg/Kg-dry	1	07/12/19 04:52 PM
Aroclor 1260	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/12/19 04:52 PM
Total PCBs	1.44	0.0603	0.121		mg/Kg-dry	1	07/12/19 04:52 PM
Surr: Decachlorobiphenyl	92.1	0	58-125		%REC	1	07/12/19 04:52 PM
Surr: Tetrachloro-m-xylene	88.4	0	40-130		%REC	1	07/12/19 04:52 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.2	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-24-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-31
Project No:	6-0141-11	**Collection Date:**	06/28/19 08:58 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0635	0.0635	0.127		mg/Kg-dry	1	07/12/19 05:18 PM
Aroclor 1221	<0.0635	0.0635	0.127		mg/Kg-dry	1	07/12/19 05:18 PM
Aroclor 1232	<0.0635	0.0635	0.127		mg/Kg-dry	1	07/12/19 05:18 PM
Aroclor 1242	<0.0635	0.0635	0.127		mg/Kg-dry	1	07/12/19 05:18 PM
Aroclor 1248	<0.0635	0.0635	0.127		mg/Kg-dry	1	07/12/19 05:18 PM
Aroclor 1254	0.441	0.0635	0.127		mg/Kg-dry	1	07/12/19 05:18 PM
Aroclor 1260	<0.0635	0.0635	0.127		mg/Kg-dry	1	07/12/19 05:18 PM
Total PCBs	0.441	0.0635	0.127		mg/Kg-dry	1	07/12/19 05:18 PM
Surr: Decachlorobiphenyl	72.9	0	58-125		%REC	1	07/12/19 05:18 PM
Surr: Tetrachloro-m-xylene	77.1	0	40-130		%REC	1	07/12/19 05:18 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	24.3	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-24-2-2.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-32
Project No:	6-0141-11	**Collection Date:**	06/28/19 09:01 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/12/19 05:43 PM
Aroclor 1221	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/12/19 05:43 PM
Aroclor 1232	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/12/19 05:43 PM
Aroclor 1242	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/12/19 05:43 PM
Aroclor 1248	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/12/19 05:43 PM
Aroclor 1254	3.10	0.0570	0.114		mg/Kg-dry	1	07/12/19 05:43 PM
Aroclor 1260	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/12/19 05:43 PM
Total PCBs	3.10	0.0570	0.114		mg/Kg-dry	1	07/12/19 05:43 PM
Surr: Decachlorobiphenyl	78.9	0	58-125		%REC	1	07/12/19 05:43 PM
Surr: Tetrachloro-m-xylene	88.2	0	40-130		%REC	1	07/12/19 05:43 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	17.7	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-25-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-33
Project No:	6-0141-11	**Collection Date:**	06/28/19 09:22 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/12/19 06:08 PM
Aroclor 1221	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/12/19 06:08 PM
Aroclor 1232	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/12/19 06:08 PM
Aroclor 1242	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/12/19 06:08 PM
Aroclor 1248	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/12/19 06:08 PM
Aroclor 1254	0.380	0.0608	0.122		mg/Kg-dry	1	07/12/19 06:08 PM
Aroclor 1260	<0.0608	0.0608	0.122		mg/Kg-dry	1	07/12/19 06:08 PM
Total PCBs	0.380	0.0608	0.122		mg/Kg-dry	1	07/12/19 06:08 PM
Surr: Decachlorobiphenyl	66.6	0	58-125		%REC	1	07/12/19 06:08 PM
Surr: Tetrachloro-m-xylene	70.8	0	40-130		%REC	1	07/12/19 06:08 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	20.6	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-25-2-3'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-34
Project No:	6-0141-11	**Collection Date:**	06/28/19 09:26 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:34 PM
Aroclor 1221	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:34 PM
Aroclor 1232	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:34 PM
Aroclor 1242	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:34 PM
Aroclor 1248	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:34 PM
Aroclor 1254	0.487	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:34 PM
Aroclor 1260	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:34 PM
Total PCBs	0.487	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:34 PM
Surr: Decachlorobiphenyl	90.4	0	58-125		%REC	1	07/12/19 06:34 PM
Surr: Tetrachloro-m-xylene	89.2	0	40-130		%REC	1	07/12/19 06:34 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	12.3	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-26-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-35
Project No:	6-0141-11	**Collection Date:**	06/28/19 09:38 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:59 PM
Aroclor 1221	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:59 PM
Aroclor 1232	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:59 PM
Aroclor 1242	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:59 PM
Aroclor 1248	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:59 PM
Aroclor 1254	12.2	0.554	1.11		mg/Kg-dry	10	07/15/19 09:46 AM
Aroclor 1260	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 06:59 PM
Total PCBs	12.2	0.554	1.11		mg/Kg-dry	10	07/15/19 09:46 AM
Surr: Decachlorobiphenyl	101	0	58-125		%REC	10	07/15/19 09:46 AM
Surr: Decachlorobiphenyl	75.1	0	58-125		%REC	1	07/12/19 06:59 PM
Surr: Tetrachloro-m-xylene	111	0	40-130		%REC	10	07/15/19 09:46 AM
Surr: Tetrachloro-m-xylene	87.5	0	40-130		%REC	1	07/12/19 06:59 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	13.8	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-26-2-2.75'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-36
Project No:	6-0141-11	**Collection Date:**	06/28/19 09:41 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0591	0.0591	0.118		mg/Kg-dry	1	07/12/19 07:24 PM
Aroclor 1221	<0.0591	0.0591	0.118		mg/Kg-dry	1	07/12/19 07:24 PM
Aroclor 1232	<0.0591	0.0591	0.118		mg/Kg-dry	1	07/12/19 07:24 PM
Aroclor 1242	<0.0591	0.0591	0.118		mg/Kg-dry	1	07/12/19 07:24 PM
Aroclor 1248	<0.0591	0.0591	0.118		mg/Kg-dry	1	07/12/19 07:24 PM
Aroclor 1254	1.34	0.0591	0.118		mg/Kg-dry	1	07/12/19 07:24 PM
Aroclor 1260	<0.0591	0.0591	0.118		mg/Kg-dry	1	07/12/19 07:24 PM
Total PCBs	1.34	0.0591	0.118		mg/Kg-dry	1	07/12/19 07:24 PM
Surr: Decachlorobiphenyl	86.6	0	58-125		%REC	1	07/12/19 07:24 PM
Surr: Tetrachloro-m-xylene	88.1	0	40-130		%REC	1	07/12/19 07:24 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.9	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-27-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-37
Project No:	6-0141-11	**Collection Date:**	06/28/19 09:51 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/12/19 07:50 PM
Aroclor 1221	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/12/19 07:50 PM
Aroclor 1232	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/12/19 07:50 PM
Aroclor 1242	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/12/19 07:50 PM
Aroclor 1248	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/12/19 07:50 PM
Aroclor 1254	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/12/19 07:50 PM
Aroclor 1260	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/12/19 07:50 PM
Total PCBs	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/12/19 07:50 PM
Surr: Decachlorobiphenyl	91.7	0	58-125		%REC	1	07/12/19 07:50 PM
Surr: Tetrachloro-m-xylene	84.9	0	40-130		%REC	1	07/12/19 07:50 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.6	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-27-2-2.75'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-38
Project No:	6-0141-11	**Collection Date:**	06/28/19 09:53 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0613	0.0613	0.123		mg/Kg-dry	1	07/12/19 08:15 PM
Aroclor 1221	<0.0613	0.0613	0.123		mg/Kg-dry	1	07/12/19 08:15 PM
Aroclor 1232	<0.0613	0.0613	0.123		mg/Kg-dry	1	07/12/19 08:15 PM
Aroclor 1242	<0.0613	0.0613	0.123		mg/Kg-dry	1	07/12/19 08:15 PM
Aroclor 1248	<0.0613	0.0613	0.123		mg/Kg-dry	1	07/12/19 08:15 PM
Aroclor 1254	0.127	0.0613	0.123		mg/Kg-dry	1	07/12/19 08:15 PM
Aroclor 1260	<0.0613	0.0613	0.123		mg/Kg-dry	1	07/12/19 08:15 PM
Total PCBs	0.127	0.0613	0.123		mg/Kg-dry	1	07/12/19 08:15 PM
Surr: Decachlorobiphenyl	85.0	0	58-125		%REC	1	07/12/19 08:15 PM
Surr: Tetrachloro-m-xylene	77.4	0	40-130		%REC	1	07/12/19 08:15 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	24.5	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-27-4-4.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907017-39
Project No:	6-0141-11	**Collection Date:**	06/28/19 09:55 AM
Lab Order:	1907017	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0529	0.0529	0.106		mg/Kg-dry	1	07/12/19 08:40 PM
Aroclor 1221	<0.0529	0.0529	0.106		mg/Kg-dry	1	07/12/19 08:40 PM
Aroclor 1232	<0.0529	0.0529	0.106		mg/Kg-dry	1	07/12/19 08:40 PM
Aroclor 1242	<0.0529	0.0529	0.106		mg/Kg-dry	1	07/12/19 08:40 PM
Aroclor 1248	<0.0529	0.0529	0.106		mg/Kg-dry	1	07/12/19 08:40 PM
Aroclor 1254	<0.0529	0.0529	0.106		mg/Kg-dry	1	07/12/19 08:40 PM
Aroclor 1260	<0.0529	0.0529	0.106		mg/Kg-dry	1	07/12/19 08:40 PM
Total PCBs	<0.0529	0.0529	0.106		mg/Kg-dry	1	07/12/19 08:40 PM
Surr: Decachlorobiphenyl	94.3	0	58-125		%REC	1	07/12/19 08:40 PM
Surr: Tetrachloro-m-xylene	88.0	0	40-130		%REC	1	07/12/19 08:40 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	13.9	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc. **Date:** *16-Jul-19*

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190710A

The QC data in batch 91695 applies to the following samples: 1907017-01A, 1907017-02A, 1907017-03A, 1907017-04A, 1907017-05A, 1907017-06A, 1907017-07A, 1907017-08A, 1907017-09A, 1907017-10A, 1907017-11A, 1907017-12A, 1907017-13A, 1907017-14A, 1907017-15A, 1907017-16A, 1907017-17A, 1907017-18A, 1907017-19A

Sample ID **LCS-91695** Batch ID: **91695** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_190710A** Analysis Date: **7/10/2019 1:35:00 PM** Prep Date: **7/9/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.804	0.100	1.000	0	80.4	41	138			
Aroclor 1260	0.846	0.100	1.000	0	84.6	61	131			
Surr: Decachlorobiphenyl	0.0887		0.1000		88.7	58	125			
Surr: Tetrachloro-m-xylene	0.0792		0.1000		79.2	40	130			

Sample ID **MB-91695** Batch ID: **91695** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_190710A** Analysis Date: **7/10/2019 2:01:00 PM** Prep Date: **7/9/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0965		0.1000		96.5	58	125			
Surr: Tetrachloro-m-xylene	0.0804		0.1000		80.4	40	130			

Sample ID **1907017-01AMS** Batch ID: **91695** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC16_190710A** Analysis Date: **7/10/2019 6:40:00 PM** Prep Date: **7/9/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.968	0.120	1.196	0	80.9	41	138			
Aroclor 1260	2.63	0.120	1.196	0	220	61	131			S
Surr: Decachlorobiphenyl	0.0907		0.1196		75.9	58	125			
Surr: Tetrachloro-m-xylene	0.0974		0.1196		81.5	40	130			

Sample ID **1907017-01AMSD** Batch ID: **91695** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC16_190710A** Analysis Date: **7/10/2019 7:05:00 PM** Prep Date: **7/9/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.01	0.120	1.199	0	84.3	41	138	4.36	50	
Aroclor 1260	2.78	0.120	1.199	0	232	61	131	5.51	50	S
Surr: Decachlorobiphenyl	0.102		0.1199		84.7	58	125	0		
Surr: Tetrachloro-m-xylene	0.104		0.1199		86.8	40	130	0		

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

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190710A

The QC data in batch 91710 applies to the following samples: 1907017-20A, 1907017-21A

Sample ID	LCS-91710	Batch ID:	91710	TestNo:	SW8082A	Units:	mg/Kg
SampType:	LCS	Run ID:	GC16_190710A	Analysis Date:	7/11/2019 12:09:00 AM	Prep Date:	7/10/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.803	0.100	1.000	0	80.3	41	138			
Aroclor 1260	0.866	0.100	1.000	0	86.6	61	131			
Surr: Decachlorobiphenyl	0.102		0.1000		102	58	125			
Surr: Tetrachloro-m-xylene	0.0899		0.1000		89.9	40	130			

Sample ID	MB-91710	Batch ID:	91710	TestNo:	SW8082A	Units:	mg/Kg
SampType:	MBLK	Run ID:	GC16_190710A	Analysis Date:	7/11/2019 12:34:00 AM	Prep Date:	7/10/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0886		0.1000		88.6	58	125			
Surr: Tetrachloro-m-xylene	0.0791		0.1000		79.1	40	130			

Sample ID	1907012-21AMS	Batch ID:	91710	TestNo:	SW8082A	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GC16_190710A	Analysis Date:	7/11/2019 5:13:00 AM	Prep Date:	7/10/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.954	0.114	1.137	0	83.8	41	138			
Aroclor 1260	1.04	0.114	1.137	0	91.4	61	131			
Surr: Decachlorobiphenyl	0.105		0.1137		92.4	58	125			
Surr: Tetrachloro-m-xylene	0.0966		0.1137		85.0	40	130			

Sample ID	1907012-21AMSD	Batch ID:	91710	TestNo:	SW8082A	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	GC16_190710A	Analysis Date:	7/11/2019 5:38:00 AM	Prep Date:	7/10/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.852	0.111	1.114	0	76.4	41	138	11.3	50	
Aroclor 1260	0.909	0.111	1.114	0	81.5	61	131	13.4	50	
Surr: Decachlorobiphenyl	0.0932		0.1114		83.6	58	125	0		
Surr: Tetrachloro-m-xylene	0.0852		0.1114		76.5	40	130	0		

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190710A

The QC data in batch 91725 applies to the following samples: 1907017-22A, 1907017-23A, 1907017-24A, 1907017-25A, 1907017-26A, 1907017-27A, 1907017-28A, 1907017-29A

Sample ID	LCS-91725	Batch ID:	91725	TestNo:	SW8082A	Units:	mg/Kg
SampType:	LCS	Run ID:	GC16_190710A	Analysis Date:	7/11/2019 11:07:00 AM	Prep Date:	7/10/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.557	0.100	1.000	0	55.7	41	138			
Aroclor 1260	0.608	0.100	1.000	0	60.8	61	131			
Surr: Decachlorobiphenyl	0.0655		0.1000		65.5	58	125			
Surr: Tetrachloro-m-xylene	0.0571		0.1000		57.1	40	130			

Sample ID	MB-91725	Batch ID:	91725	TestNo:	SW8082A	Units:	mg/Kg
SampType:	MBLK	Run ID:	GC16_190710A	Analysis Date:	7/11/2019 11:32:00 AM	Prep Date:	7/10/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0933		0.1000		93.3	58	125			
Surr: Tetrachloro-m-xylene	0.0788		0.1000		78.8	40	130			

Sample ID	1907012-39AMS	Batch ID:	91725	TestNo:	SW8082A	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GC16_190710A	Analysis Date:	7/11/2019 4:11:00 PM	Prep Date:	7/10/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.14	0.109	1.087	0	105	41	138			
Aroclor 1260	1.25	0.109	1.087	0	114	61	131			
Surr: Decachlorobiphenyl	0.0594		0.1087		54.6	58	125			S
Surr: Tetrachloro-m-xylene	0.0705		0.1087		64.8	40	130			

Sample ID	1907012-39AMSD	Batch ID:	91725	TestNo:	SW8082A	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	GC16_190710A	Analysis Date:	7/11/2019 4:37:00 PM	Prep Date:	7/10/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.18	0.112	1.118	0	106	41	138	3.80	50	
Aroclor 1260	1.28	0.112	1.118	0	115	61	131	2.94	50	
Surr: Decachlorobiphenyl	0.0757		0.1118		67.7	58	125	0		
Surr: Tetrachloro-m-xylene	0.0827		0.1118		73.9	40	130	0		

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190712A

The QC data in batch 91695 applies to the following samples: 1907017-01A, 1907017-02A, 1907017-03A, 1907017-04A, 1907017-05A, 1907017-06A, 1907017-07A, 1907017-08A, 1907017-09A, 1907017-10A, 1907017-11A, 1907017-12A, 1907017-13A, 1907017-14A, 1907017-15A, 1907017-16A, 1907017-17A, 1907017-18A, 1907017-19A

Sample ID **SB-190712** Batch ID: **91695** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **SBLK** Run ID: **GC16_190712A** Analysis Date: **7/12/2019 9:16:00 AM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1254	<0.0500	0.100	0							
Total PCBs	<0.0500	0.100	0							

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

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190712B

The QC data in batch 91731 applies to the following samples: 1907017-30A, 1907017-31A, 1907017-32A, 1907017-33A, 1907017-34A, 1907017-35A, 1907017-36A, 1907017-37A, 1907017-38A, 1907017-39A

Sample ID	**LCS-91731**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg**
SampType:	**LCS**	Run ID:	**GC16_190712B**	Analysis Date:	**7/12/2019 4:02:00 PM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.807	0.100	1.000	0	80.7	41	138			
Aroclor 1260	0.861	0.100	1.000	0	86.1	61	131			
Surr: Decachlorobiphenyl	0.0909		0.1000		90.9	58	125			
Surr: Tetrachloro-m-xylene	0.0833		0.1000		83.3	40	130			

Sample ID	**MB-91731**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg**
SampType:	**MBLK**	Run ID:	**GC16_190712B**	Analysis Date:	**7/12/2019 4:27:00 PM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0878		0.1000		87.8	58	125			
Surr: Tetrachloro-m-xylene	0.0822		0.1000		82.2	40	130			

Sample ID	**1907017-30AMS**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg-dry**
SampType:	**MS**	Run ID:	**GC16_190712B**	Analysis Date:	**7/12/2019 9:06:00 PM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.982	0.117	1.173	0	83.7	41	138			
Aroclor 1260	1.45	0.117	1.173	0	124	61	131			
Surr: Decachlorobiphenyl	0.0901		0.1173		76.8	58	125			
Surr: Tetrachloro-m-xylene	0.0874		0.1173		74.5	40	130			

Sample ID	**1907017-30AMSD**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg-dry**
SampType:	**MSD**	Run ID:	**GC16_190712B**	Analysis Date:	**7/12/2019 9:31:00 PM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.03	0.117	1.166	0	88.2	41	138	4.64	50	
Aroclor 1260	1.32	0.117	1.166	0	113	61	131	9.67	50	
Surr: Decachlorobiphenyl	0.102		0.1166		87.8	58	125	0		
Surr: Tetrachloro-m-xylene	0.0999		0.1166		85.7	40	130	0		

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190715A

The QC data in batch 91731 applies to the following samples: 1907017-30A, 1907017-31A, 1907017-32A, 1907017-33A, 1907017-34A, 1907017-35A, 1907017-36A, 1907017-37A, 1907017-38A, 1907017-39A

Sample ID	**SB-190715**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg**
SampType:	**SBLK**	Run ID:	**GC16_190715A**	Analysis Date:	**7/15/2019 9:21:00 AM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1254	<0.0500	0.100	0							
Total PCBs	<0.0500	0.100	0							

Qualifiers:				
B	Analyte detected in the associated Method Blank	DF	Dilution Factor	
J	Analyte detected between MDL and RL	MDL	Method Detection Limit	Page 6 of 9
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits	
RL	Reporting Limit	S	Spike Recovery outside control limits	
J	Analyte detected between SDL and RL	N	Parameter not NELAP certified	

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190709A**

The QC data in batch 91707 applies to the following samples: 1907017-01A, 1907017-02A, 1907017-03A, 1907017-04A, 1907017-05A, 1907017-06A, 1907017-07A, 1907017-08A, 1907017-09A, 1907017-10A, 1907017-11A, 1907017-12A, 1907017-13A, 1907017-14A, 1907017-15A, 1907017-16A

Sample ID **1907052-01A-DUP** Batch ID: **91707** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190709A** Analysis Date: **7/10/2019 8:30:00 AM** Prep Date: **7/9/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	30.6	0	0	32.44				6.00	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_190710A

The QC data in batch 91729 applies to the following samples: 1907017-17A, 1907017-18A, 1907017-19A, 1907017-20A, 1907017-21A, 1907017-22A, 1907017-23A, 1907017-24A, 1907017-25A, 1907017-26A, 1907017-27A, 1907017-28A, 1907017-29A, 1907017-30A, 1907017-31A

Sample ID **1907017-28A-DUP** Batch ID: **91729** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190710A** Analysis Date: **7/11/2019 9:00:00 AM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	10.7	0	0	10.60				1.34	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907017
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190711A**

The QC data in batch 91743 applies to the following samples: 1907017-32A, 1907017-33A, 1907017-34A, 1907017-35A, 1907017-36A, 1907017-37A, 1907017-38A, 1907017-39A

Sample ID	**1907120-02A-DUP**	Batch ID:	**91743**	TestNo:	**D2216**	Units:	**WT%**
SampType:	**DUP**	Run ID:	**PMOIST_190711A**	Analysis Date:	**7/12/2019 9:50:00 AM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	4.19	0	0	4.180				0.171	30	

Qualifiers:

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

July 16, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1907018

RE: Empire ABO/EA-10

Dear Mark Larson:

DHL Analytical, Inc. received 1 sample(s) on 7/2/2019 for the analyses presented in the following report.

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

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

Sincerely,

John DuPont
General Manager

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

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Nº 0294

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 205
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-28-2019 PAGE 3 OF 3
PO#: LAB WORK ORDER#: 1907018
PROJECT LOCATION OR NAME: Empire Abo/Ea.10
LAI PROJECT #: 6-0141-11 COLLECTOR: ML/RM

TRRP report? ☐ Yes ☑ No
TIME ZONE: Time zone/State: Mtn/New

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☐ | DIESEL - MOD 8015 ☐ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBs ☐ | TBLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESERVED	8081 PESTICIDES	8082 PCBs	FIELD NOTES
10-24-0-1.5'	~~31~~	6/29/19	08:58	S	1				X				
10-24-2-2.5'	~~32~~		09:01		1								
10-25-0-1.5'	~~33~~		09:22		1								
10-25-2-3'	~~34~~		09:26		1								
10-26-0-1.5'	~~35~~		09:38		1								
10-26-2-2.75'	~~36~~		09:41		1								
10-27-0-1.5'	~~37~~		09:51		1								
10-27-2-2.75'	~~38~~		09:53		1								
10-27-4-4.5'	~~39~~	(ML 7/1/19)	09:55		1								
Thurm Comp	01	↓	10:45	↓	1				↓		↓	↓	
TOTAL					10								

RELINQUISHED BY:(Signature) DATE/TIME July 1, 2019 08:00 RECEIVED BY: (Signature) LSO
RELINQUISHED BY:(Signature) LSO DATE/TIME 7-2-19 08:10 RECEIVED BY: (Signature)
RELINQUISHED BY:(Signature) DATE/TIME RECEIVED BY: (Signature)

LABORATORY: DHL

3

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 4.2 THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

Received by OCD: 4/3/2023 2:46:30 PM
Released to Imaging: 4/3/2023 3:36:09 PM

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1. To: Print Name (Person) / Phone (Important)

Company Name

Street Address (No P.O. Box or P.O. Box Zip Code for Deliveries)

Suite / Floor

City / State / Zip

2. From: Print Name (Person) / Phone (Important)

Company Name

Street Address

Suite / Floor

City / State / Zip

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- ☒ LSO Priority Overnight* — By 10:30 a.m. to most cities
- ☐ LSO Early Overnight* — By 8:30 a.m. select cities
- ☐ LSO Economy Next Day* — By 3 p.m. to most cities
- ☐ LSO 2nd Day*
- ☐ LSO Ground
- ☐ LSO Saturday*
- ☐ Other _____

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

☐ Deliver Without Delivery Signature (See Limits of Liability below)

_____
Release Signature

L_____ x W_____ x H_____

4. Package: Weight:

Your Company's Billing Reference Information

Ship Date: (mm/dd/yy) 07 / 01 / 19

5. Payment:

FOR DRIVER USE ONLY

Driver Number _____

☐ Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location _____

Date: _____

Time: _____

City Code:

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. **NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY.** See LSO Service Guide for further details.

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DATE 7/1/2019
SIGNATURE

QEC
Quality Environmental Containers
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Received by OCD: 4/3/2023 2:46:30 PM

Released to Imaging: 4/3/2023 3:36:09 PM

Released to Imaging: 4/3/2023 3:36:09 PM

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates

Date Received: 7/2/2019

Work Order Number 1907018

Received by CC

Checklist completed by: _____ 7/2/2019 (Signature / Date)

Reviewed by: MB 7/2/2019 (Initials / Date)

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	4.2 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Received by OCD: 4/3/2023 2:46:30 PM

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DHL Analytical, Inc. **Date:** *16-Jul-19*

CLIENT: Larson & Associates
Project: Empire ABO/EA-10
Lab Order: 1907018

CASE NARRATIVE

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

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

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	Drum Comp
Project:	Empire ABO/EA-10	**Lab ID:**	1907018-01
Project No:	6-0141-11	**Collection Date:**	06/28/19 10:45 AM
Lab Order:	1907018	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 10:22 PM
Aroclor 1221	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 10:22 PM
Aroclor 1232	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 10:22 PM
Aroclor 1242	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 10:22 PM
Aroclor 1248	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 10:22 PM
Aroclor 1254	13.9	0.554	1.11		mg/Kg-dry	10	07/15/19 10:12 AM
Aroclor 1260	<0.0554	0.0554	0.111		mg/Kg-dry	1	07/12/19 10:22 PM
Total PCBs	13.9	0.554	1.11		mg/Kg-dry	10	07/15/19 10:12 AM
Surr: Decachlorobiphenyl	118	0	58-125		%REC	10	07/15/19 10:12 AM
Surr: Decachlorobiphenyl	84.0	0	58-125		%REC	1	07/12/19 10:22 PM
Surr: Tetrachloro-m-xylene	111	0	40-130		%REC	10	07/15/19 10:12 AM
Surr: Tetrachloro-m-xylene	87.6	0	40-130		%REC	1	07/12/19 10:22 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	13.0	0	0		WT%	1	07/12/19 09:50 AM

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

DHL Analytical, Inc. **Date:** *16-Jul-19*

CLIENT: Larson & Associates
Work Order: 1907018
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: **GC16_190712B**

The QC data in batch 91731 applies to the following samples: 1907018-01A

Sample ID	**LCS-91731**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg**
SampType:	**LCS**	Run ID:	**GC16_190712B**	Analysis Date:	**7/12/2019 4:02:00 PM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.807	0.100	1.000	0	80.7	41	138			
Aroclor 1260	0.861	0.100	1.000	0	86.1	61	131			
Surr: Decachlorobiphenyl	0.0909		0.1000		90.9	58	125			
Surr: Tetrachloro-m-xylene	0.0833		0.1000		83.3	40	130			

Sample ID	**MB-91731**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg**
SampType:	**MBLK**	Run ID:	**GC16_190712B**	Analysis Date:	**7/12/2019 4:27:00 PM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0878		0.1000		87.8	58	125			
Surr: Tetrachloro-m-xylene	0.0822		0.1000		82.2	40	130			

Sample ID	**1907017-30AMS**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg-dry**
SampType:	**MS**	Run ID:	**GC16_190712B**	Analysis Date:	**7/12/2019 9:06:00 PM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.982	0.117	1.173	0	83.7	41	138			
Aroclor 1260	1.45	0.117	1.173	0	124	61	131			
Surr: Decachlorobiphenyl	0.0901		0.1173		76.8	58	125			
Surr: Tetrachloro-m-xylene	0.0874		0.1173		74.5	40	130			

Sample ID	**1907017-30AMSD**	Batch ID:	**91731**	TestNo:	**SW8082A**	Units:	**mg/Kg-dry**
SampType:	**MSD**	Run ID:	**GC16_190712B**	Analysis Date:	**7/12/2019 9:31:00 PM**	Prep Date:	**7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.03	0.117	1.166	0	88.2	41	138	4.64	50	
Aroclor 1260	1.32	0.117	1.166	0	113	61	131	9.67	50	
Surr: Decachlorobiphenyl	0.102		0.1166		87.8	58	125	0		
Surr: Tetrachloro-m-xylene	0.0999		0.1166		85.7	40	130	0		

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

CLIENT: Larson & Associates
Work Order: 1907018
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190715A

The QC data in batch 91731 applies to the following samples: 1907018-01A

Sample ID **SB-190715** Batch ID: **91731** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **SBLK** Run ID: **GC16_190715A** Analysis Date: **7/15/2019 9:21:00 AM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1254	<0.0500	0.100	0							
Total PCBs	<0.0500	0.100	0							

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907018
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190711A**

The QC data in batch 91743 applies to the following samples: 1907018-01A

Sample ID **1907120-02A-DUP** Batch ID: **91743** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190711A** Analysis Date: **7/12/2019 9:50:00 AM** Prep Date: **7/11/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	4.19	0	0	4.180				0.171	30	

Qualifiers:

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

June 06, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1905326

RE: AKB Energy/Eddy Co NM

Dear Mark Larson:

DHL Analytical, Inc. received 2 sample(s) on 5/31/2019 for the analyses presented in the following report.

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

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

Sincerely,

John DuPont
General Manager

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

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CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 5-29-2019 PAGE 1 OF 1

PO #: LAB WORK ORDER #: 1905326

PROJECT LOCATION OR NAME: AKs Energy / Eddy Co NM

LAI PROJECT #: L-01141-10 COLLECTOR: ML

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: NM/Mtn

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES: 8081 PESTICIDES ☐	8082 PCBs ☐
BH-04, 0-2.0	01	5/29/19	09:00	S	1				✓		✓	
BH-04, 2.0-2.5'	02	5/29/19	09:20	S	1				✓		✓	
TOTAL												

ANALYSES: BTEX ☐ MTBE ☐ | TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☐ | DIESEL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8151 HERBICIDES ☐ | TCLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐ | FIELD NOTES

RELINQUISHED BY:(Signature) DATE/TIME 5/29/19 RECEIVED BY: (Signature) 19:50

RELINQUISHED BY:(Signature) DATE/TIME 5/31/19 0740 RECEIVED BY: (Signature)

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

DHL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 1.1°C THERM #: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☐ CARRIER BILL # Lone Star
☐ HAND DELIVERED

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Released to Imaging: 4/3/2023 3:36:09 PM

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LSO

WWW.LSO.COM
Questions? Call 800-800-8984

Airbill No. LSO065Y3

LSO065Y3

1. To: Print Name (Person) _____ Phone (Important) _____

Company Name _____

Street Address (No P.O. Box or P.O. Box Zip Code Deliveries) _____

Suite / Floor _____

City _____ State _____ Zip _____

2. From: Print Name (Person) JOHN WHITE Phone (Important) 432-687-0901

Company Name LARSON & ASSOCIATES

Street Address 507 NORTH MARIENFELD

Suite / Floor 205

City MIDLAND State TX Zip 79701

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- [X] **LSO Priority Overnight*** By 10:30 a.m. to most cities
- [ ] **LSO Early Overnight*** By 8:30 a.m. select cities
- [ ] **LSO Economy Next Day*** By 3 p.m. to most cities
- [ ] **LSO 2nd Day***
- [ ] **LSO Ground**
- [ ] **LSO Saturday***
- [ ] Other _____

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

- [ ] Deliver Without Delivery Signature (See Limits of Liability below)

Release Signature _____

L 14 x W 12 x H 12

4. Package: Weight: 15

Your Company's Billing Reference Information _____

Ship Date: mm/dd/yy) 05/30/23

5. Payment:

FOR DRIVER USE ONLY

Driver Number 101676

- [ ] Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location OL

Date: 5-30-23

Time: 1100

City Code: AUS

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY. See LSO Service Guide for further details.

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DATE SIGNATURE

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DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates Date Received: 5/31/2019

Work Order Number 1905326 Received by JW

Checklist completed by: Signature 5/31/2019 Date Reviewed by Initials 5/31/2019 Date

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	1.1 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

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

Client contacted Date contacted: Person contacted

Contacted by: Regarding:

Comments:

Corrective Action

Page 1 of 1

DHL Analytical, Inc. **Date:** *06-Jun-19*

CLIENT: Larson & Associates
Project: AKB Energy/Eddy Co NM
Lab Order: 1905326

CASE NARRATIVE

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

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

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For PCB Analysis, the recovery of surrogate Decachlorobiphenyl for Sample BH-04, 0-2.0' was outside of the method control limits. This is flagged accordingly in the Analytical Data Report. The remaining surrogate for this sample was within method control limits. No further corrective action was taken.

For PCB Analysis, an MS/MSD could not be reported due to matrix.

DHL Analytical, Inc.

Date: *06-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	BH-04, 0-2.0'
Project:	AKB Energy/Eddy Co NM	**Lab ID:**	1905326-01
Project No:	L-0141-10	**Collection Date:**	05/29/19 09:00 AM
Lab Order:	1905326	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<5.62	5.62	11.2		mg/Kg-dry	100	06/04/19 02:26 PM
Aroclor 1221	<5.62	5.62	11.2		mg/Kg-dry	100	06/04/19 02:26 PM
Aroclor 1232	<5.62	5.62	11.2		mg/Kg-dry	100	06/04/19 02:26 PM
Aroclor 1242	<5.62	5.62	11.2		mg/Kg-dry	100	06/04/19 02:26 PM
Aroclor 1248	<5.62	5.62	11.2		mg/Kg-dry	100	06/04/19 02:26 PM
Aroclor 1254	257	5.62	11.2		mg/Kg-dry	100	06/04/19 02:26 PM
Aroclor 1260	<5.62	5.62	11.2		mg/Kg-dry	100	06/04/19 02:26 PM
Total PCBs	257	5.62	11.2		mg/Kg-dry	100	06/04/19 02:26 PM
Surr: Decachlorobiphenyl	729000	0	58-125	S	%REC	100	06/04/19 02:26 PM
Surr: Tetrachloro-m-xylene	101	0	40-130		%REC	100	06/04/19 02:26 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	11.4	0	0		WT%	1	06/04/19 08:40 AM

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

DHL Analytical, Inc.

Date: *06-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	BH-04, 2.0-2.5'
Project:	AKB Energy/Eddy Co NM	**Lab ID:**	1905326-02
Project No:	L-0141-10	**Collection Date:**	05/29/19 09:20 AM
Lab Order:	1905326	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/04/19 12:04 PM
Aroclor 1221	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/04/19 12:04 PM
Aroclor 1232	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/04/19 12:04 PM
Aroclor 1242	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/04/19 12:04 PM
Aroclor 1248	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/04/19 12:04 PM
Aroclor 1254	3.46	0.0589	0.118		mg/Kg-dry	1	06/04/19 12:04 PM
Aroclor 1260	<0.0589	0.0589	0.118		mg/Kg-dry	1	06/04/19 12:04 PM
Total PCBs	3.46	0.0589	0.118		mg/Kg-dry	1	06/04/19 12:04 PM
Surr: Decachlorobiphenyl	93.2	0	58-125		%REC	1	06/04/19 12:04 PM
Surr: Tetrachloro-m-xylene	96.0	0	40-130		%REC	1	06/04/19 12:04 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	18.6	0	0		WT%	1	06/04/19 08:40 AM

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

DHL Analytical, Inc. **Date:** *06-Jun-19*

CLIENT: Larson & Associates
Work Order: 1905326
Project: AKB Energy/Eddy Co NM

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190604A

The QC data in batch 91163 applies to the following samples: 1905326-01A, 1905326-02A

Sample ID **LCS-91163** Batch ID: **91163** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_190604A** Analysis Date: **6/4/2019 10:48:00 AM** Prep Date: **6/3/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.923	0.100	1.000	0	92.3	41	138			
Aroclor 1260	0.931	0.100	1.000	0	93.1	61	131			
Surr: Decachlorobiphenyl	0.0723		0.1000		72.3	58	125			
Surr: Tetrachloro-m-xylene	0.0898		0.1000		89.8	40	130			

Sample ID **MB-91163** Batch ID: **91163** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_190604A** Analysis Date: **6/4/2019 11:14:00 AM** Prep Date: **6/3/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0752		0.1000		75.2	58	125			
Surr: Tetrachloro-m-xylene	0.0885		0.1000		88.5	40	130			

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

CLIENT: Larson & Associates
Work Order: 1905326
Project: AKB Energy/Eddy Co NM

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190603A**

The QC data in batch 91172 applies to the following samples: 1905326-01A, 1905326-02A

Sample ID **1905328-02D-DUP** Batch ID: **91172** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190603A** Analysis Date: **6/4/2019 8:40:00 AM** Prep Date: **6/3/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	17.9	0	0	17.78				0.693	30	

Qualifiers:

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

July 16, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1907012

RE: Empire ABO/EA-10

Dear Mark Larson:

DHL Analytical, Inc. received 42 sample(s) on 7/2/2019 for the analyses presented in the following report.

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

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

Sincerely,

John DuPont
General Manager

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

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№ 0295

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-28-2019 PAGE 1 OF 3

PO#: LAB WORK ORDER#: 1907012

PROJECT LOCATION OR NAME: Empire ABO / ES-TO

LAI PROJECT #: 6-0141-11 COLLECTOR: ML/RN

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: Mtn/ NM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESSERVED

ANALYSES: BTEX ☐ MTBE ☐ | TRPH 418.1 ☐ | TPH 1005 ☐ TPH 1006 ☐ | GASOLINE MOD 8015 ☐ | DIESEL - MOD 8015 ☐ | OIL - MOD 8015 ☐ | VOC 8260 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ | 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ | 8082 PCBS ☐ | TBLP - METALS (RCRA) ☐ TCLP VOC ☐ | TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ | TOTAL METALS (RCRA) ☐ OTHER LIST ☐ | LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ | RCI ☐ TOX ☐ FLASHPOINT ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ | pH ☐ HEXAVALENT CHROMIUM ☐ | EXPLOSIVES ☐ PECHLORATE ☐ | CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	HCl	HNO_3	H_2SO_4 NaOH	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
10-06-3-4'	01	6/27/19	08:45	S	1				X		8081 PESTICIDES ☐	
10-06-5-6'	02		08:54		1							
10-06-7-7.5'	03		09:04		1							
10-07-3-3.25'	04		09:22		1							
10-09-0-0.25'	05		09:39		1							
10-09-2-2.25'	06		09:46		1							
10-09-0-1.25'	07		10:09		1							
10-09-2-2.25'	08		10:12		1							
10-09-4-4.25'	09		10:17		1							
10-10-0-1.25'	10		10:31		1							
10-10-2-3'	11		10:35		1							
10-10-4-4.25'	12		10:38		1							
10-11-0-1'	13		10:54		1							
10-11-2-2.5'	14		10:59		1							
10-11-3-3.25'	15	↓	11:03	↓	1				↓		↓	
TOTAL												

RELINQUISHED BY:(Signature) DATE/TIME 07/01/19 08:00 RECEIVED BY: (Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 7/2/19 0810 RECEIVED BY: (Signature)

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

LABORATORY: DHL

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 3.1°C THERM#: 18
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

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№ 0296

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-28-2019 PAGE 2 OF 3

PO#: LAB WORK ORDER#: 1907012

PROJECT LOCATION OR NAME: Empire ABO / EA-10

LAI PROJECT #: 6-0141-17 COLLECTOR: ML / AN

TRRP report? ☐ Yes ☐ No

TIME ZONE: Time zone/State: MDT / NM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
10-12-0-1.25'	16	6/27/19	11:25	S	1				X			
10-12-2-3.5'	17		11:28		1							
10-12-4-4.5'	18		11:31		1							
10-12-6-6.5'	19		11:35		1							
10-13-0-0.5'	20		12:53		1							
10-13-2-2.5'	21		12:58		1							
10-13-3-4'	22		13:02		1							
10-14-0-1.5'	23		13:18		1							
10-14-2-2.5'	24		13:21		1							
10-14-4-4.25'	25		13:24		1							
10-15-0-1.25'	26		13:33		1							
10-15-2-2.5'	27		13:40		1							
10-15-4-4.5'	28		13:44		1							
10-14-0-1.5'	29		14:09		1							
10-12-2-2.5'	30		14:14		1							
TOTAL					15							

ANALYSES: ☐ BTEX ☐ MTBE ☐ TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐ TBLP - METALS (RCRA) ☐ TCLP VOC ☐ TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ TOTAL METALS (RCRA) ☐ OTHER LIST ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐

RELINQUISHED BY:(Signature) DATE/TIME 7/1/19 08:00 RECEIVED BY: (Signature) LAI

RELINQUISHED BY:(Signature) LAI DATE/TIME 9/2/19 0810 RECEIVED BY: (Signature) Talon/LPE

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

LABORATORY: DHL

4

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 3.0°C THERM#: 18
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

Received by OCD: 4/3/2023 2:46:30 PM

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№ 0297

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-28-2019 PAGE 3 OF 3

PO#:

LAB WORK ORDER#: 1907012

PROJECT LOCATION OR NAME: Empire ABO / Ea-10

LAI PROJECT #: 6-0141-11 COLLECTOR: MZ / RN

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: MDT / NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES
10-16-4-4.25'	31	6/27/19	14:17	S	1				X		
10-17-0-1.5'	32		14:36		1						
10-17-2-2.5'	33		14:39		1						
10-17-4-4.25'	34		14:44		1						
10-18-0-1.75'	35		14:59		1						
10-18-2-2.75'	36		15:02		1						
10-18-4-4.5'	37		15:06		1						
10-19-0-1'	38		15:24		1						
10-19-2-2.5'	39		15:28		1						
10-20-0-1.5'	40		15:37		1						
10-20-2-3'	41		15:41		1						
10-20-4-4.5'	42	↓	15:46	↓	1				↓		
TOTAL					12						

ANALYSES: BTEX ☐ MTBE ☐ TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐ TBLP - METALS (RCRA) ☐ TCLP - PEST ☐ HERB ☐ TCLP VOC ☐ TOTAL METALS (RCRA) ☐ Semi-VOC ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ OTHER LIST ☐ RCI ☐ TOX ☐ TCLP ☐ TDS ☐ TSS ☐ FLASHPOINT ☐ pH ☐ % MOISTURE ☐ CYANIDE ☐ EXPLOSIVES ☐ HEXAVALENT CHROMIUM ☐ CHLORIDE ☐ PECHLORATE ☐ ANIONS ☐ ALKALINITY ☐

FIELD NOTES

RELINQUISHED BY:(Signature) DATE/TIME 7/1/19 08:00 RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME 7/2/19 0810 RECEIVED BY: (Signature)

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

LABORATORY: DHL

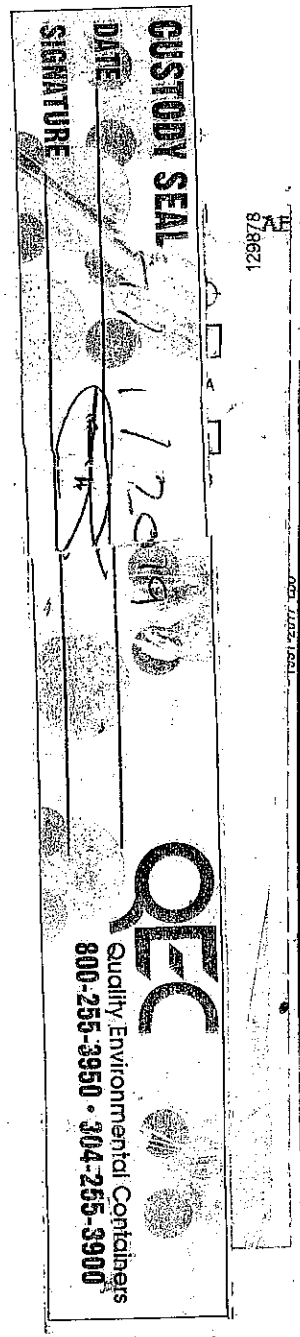
TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 3.0°C THERM#: 18
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

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129878

LSO

WWW.LSO.COM
Questions? Call 800-800-8984

Airbill No. LSO0BYFX



1. To: Print Name (Person) [illegible] Phone (Important) [illegible]

Company Name: DCP Midstream

Street Address (No P.O. Box or P.O. Box Zip Code Deliveries): 2210 Double Eagle Ct.

Suite / Floor:

City: Round Rock State: TX Zip: 78664

2. From: Print Name (Person) [illegible] Phone (Important) 432-687-0901

Company Name: LARSON & ASSOCIATES

Street Address: 507 NORTH MARIENFELD

Suite / Floor: 205

City: MIDLAND State: TX Zip: 79701

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- [x] **LSO Priority Overnight*** By 10:30 a.m. to most cities
- [ ] **LSO Early Overnight*** By 8:30 a.m. select cities
- [ ] **LSO Economy Next Day*** By 3 p.m. to most cities
- [ ] **LSO 2nd Day***
- [ ] **LSO Ground**
- [ ] **LSO Saturday***
- [ ] Other _____

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

- [ ] Deliver Without Delivery Signature (See Limits of Liability below)

Release Signature

L _____ x W _____ x H _____

4. Package: Weight: [illegible]

Your Company's Billing Reference Information

Ship Date: (mm/dd/yy) 7/11/19

5. Payment:

FOR DRIVER USE ONLY

Driver Number _____

- [ ] Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location _____

Date: _____

Time: _____

City Code:

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY. See LSO Service Guide for further details.

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DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates | Date Received: 7/2/2019

Work Order Number 1907012 | Received by JW

Checklist completed by: _____ 7/2/2019 (Signature / Date) | Reviewed by CC 7/2/2019 (Initials / Date)

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	3.6 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

DHL Analytical, Inc. **Date:** *16-Jul-19*

CLIENT: Larson & Associates
Project: Empire ABO/EA-10
Lab Order: 1907012

CASE NARRATIVE

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

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

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For PCB Analysis, the recoveries of various surrogates for eleven samples are outside of the method control limits, due to matrix/dilutions. Additionally, the recovery of surrogate Decachlorobiphenyl for the Matrix Spike (1907012-39 MS) was below the method control limits. These are flagged accordingly in the Analytical Data Report and the QC Summary Report. No further corrective action was taken.

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-06-3-4'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-01
Project No:	6-0141-11	**Collection Date:**	06/27/19 08:45 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0573	0.0573	0.115		mg/Kg-dry	1	07/05/19 01:43 PM
Aroclor 1221	<0.0573	0.0573	0.115		mg/Kg-dry	1	07/05/19 01:43 PM
Aroclor 1232	<0.0573	0.0573	0.115		mg/Kg-dry	1	07/05/19 01:43 PM
Aroclor 1242	<0.0573	0.0573	0.115		mg/Kg-dry	1	07/05/19 01:43 PM
Aroclor 1248	<0.0573	0.0573	0.115		mg/Kg-dry	1	07/05/19 01:43 PM
Aroclor 1254	2.08	0.0573	0.115		mg/Kg-dry	1	07/05/19 01:43 PM
Aroclor 1260	<0.0573	0.0573	0.115		mg/Kg-dry	1	07/05/19 01:43 PM
Total PCBs	2.08	0.0573	0.115		mg/Kg-dry	1	07/05/19 01:43 PM
Surr: Decachlorobiphenyl	71.1	0	58-125		%REC	1	07/05/19 01:43 PM
Surr: Tetrachloro-m-xylene	93.5	0	40-130		%REC	1	07/05/19 01:43 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	14.9	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-06-5-6'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-02
Project No:	6-0141-11	**Collection Date:**	06/27/19 08:54 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0548	0.0548	0.110		mg/Kg-dry	1	07/05/19 02:09 PM
Aroclor 1221	<0.0548	0.0548	0.110		mg/Kg-dry	1	07/05/19 02:09 PM
Aroclor 1232	<0.0548	0.0548	0.110		mg/Kg-dry	1	07/05/19 02:09 PM
Aroclor 1242	<0.0548	0.0548	0.110		mg/Kg-dry	1	07/05/19 02:09 PM
Aroclor 1248	<0.0548	0.0548	0.110		mg/Kg-dry	1	07/05/19 02:09 PM
Aroclor 1254	7.30	0.274	0.548		mg/Kg-dry	5	07/08/19 06:37 PM
Aroclor 1260	<0.0548	0.0548	0.110		mg/Kg-dry	1	07/05/19 02:09 PM
Total PCBs	<0.0548	0.0548	0.110		mg/Kg-dry	1	07/05/19 02:09 PM
Surr: Decachlorobiphenyl	102	0	58-125		%REC	5	07/08/19 06:37 PM
Surr: Decachlorobiphenyl	77.7	0	58-125		%REC	1	07/05/19 02:09 PM
Surr: Tetrachloro-m-xylene	111	0	40-130		%REC	5	07/08/19 06:37 PM
Surr: Tetrachloro-m-xylene	88.7	0	40-130		%REC	1	07/05/19 02:09 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	14.9	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-06-7-7.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-03
Project No:	6-0141-11	**Collection Date:**	06/27/19 09:04 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0568	0.0568	0.114		mg/Kg-dry	1	07/05/19 02:34 PM
Aroclor 1221	<0.0568	0.0568	0.114		mg/Kg-dry	1	07/05/19 02:34 PM
Aroclor 1232	<0.0568	0.0568	0.114		mg/Kg-dry	1	07/05/19 02:34 PM
Aroclor 1242	<0.0568	0.0568	0.114		mg/Kg-dry	1	07/05/19 02:34 PM
Aroclor 1248	<0.0568	0.0568	0.114		mg/Kg-dry	1	07/05/19 02:34 PM
Aroclor 1254	0.0725	0.0568	0.114	J	mg/Kg-dry	1	07/05/19 02:34 PM
Aroclor 1260	<0.0568	0.0568	0.114		mg/Kg-dry	1	07/05/19 02:34 PM
Total PCBs	0.0725	0.0568	0.114	J	mg/Kg-dry	1	07/05/19 02:34 PM
Surr: Decachlorobiphenyl	109	0	58-125		%REC	1	07/05/19 02:34 PM
Surr: Tetrachloro-m-xylene	98.2	0	40-130		%REC	1	07/05/19 02:34 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	15.2	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-07-3-3.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-04
Project No:	6-0141-11	**Collection Date:**	06/27/19 09:26 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/05/19 02:59 PM
Aroclor 1221	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/05/19 02:59 PM
Aroclor 1232	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/05/19 02:59 PM
Aroclor 1242	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/05/19 02:59 PM
Aroclor 1248	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/05/19 02:59 PM
Aroclor 1254	0.913	0.0606	0.121		mg/Kg-dry	1	07/05/19 02:59 PM
Aroclor 1260	<0.0606	0.0606	0.121		mg/Kg-dry	1	07/05/19 02:59 PM
Total PCBs	0.913	0.0606	0.121		mg/Kg-dry	1	07/05/19 02:59 PM
Surr: Decachlorobiphenyl	96.1	0	58-125		%REC	1	07/05/19 02:59 PM
Surr: Tetrachloro-m-xylene	96.9	0	40-130		%REC	1	07/05/19 02:59 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	18.7	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-08-0-0.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-05
Project No:	6-0141-11	**Collection Date:**	06/27/19 09:39 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0604	0.0604	0.121		mg/Kg-dry	1	07/05/19 03:25 PM
Aroclor 1221	<0.0604	0.0604	0.121		mg/Kg-dry	1	07/05/19 03:25 PM
Aroclor 1232	<0.0604	0.0604	0.121		mg/Kg-dry	1	07/05/19 03:25 PM
Aroclor 1242	<0.0604	0.0604	0.121		mg/Kg-dry	1	07/05/19 03:25 PM
Aroclor 1248	<0.0604	0.0604	0.121		mg/Kg-dry	1	07/05/19 03:25 PM
Aroclor 1254	<0.0604	0.0604	0.121		mg/Kg-dry	1	07/05/19 03:25 PM
Aroclor 1260	<0.0604	0.0604	0.121		mg/Kg-dry	1	07/05/19 03:25 PM
Total PCBs	<0.0604	0.0604	0.121		mg/Kg-dry	1	07/05/19 03:25 PM
Surr: Decachlorobiphenyl	96.7	0	58-125		%REC	1	07/05/19 03:25 PM
Surr: Tetrachloro-m-xylene	96.6	0	40-130		%REC	1	07/05/19 03:25 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.0	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-08-2-2.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-06
Project No:	6-0141-11	**Collection Date:**	06/27/19 09:46 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/05/19 03:50 PM
Aroclor 1221	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/05/19 03:50 PM
Aroclor 1232	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/05/19 03:50 PM
Aroclor 1242	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/05/19 03:50 PM
Aroclor 1248	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/05/19 03:50 PM
Aroclor 1254	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/05/19 03:50 PM
Aroclor 1260	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/05/19 03:50 PM
Total PCBs	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/05/19 03:50 PM
Surr: Decachlorobiphenyl	98.2	0	58-125		%REC	1	07/05/19 03:50 PM
Surr: Tetrachloro-m-xylene	92.7	0	40-130		%REC	1	07/05/19 03:50 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.7	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-09-0-1.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-07
Project No:	6-0141-11	**Collection Date:**	06/27/19 10:09 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0536	0.0536	0.107		mg/Kg-dry	1	07/05/19 04:15 PM
Aroclor 1221	<0.0536	0.0536	0.107		mg/Kg-dry	1	07/05/19 04:15 PM
Aroclor 1232	<0.0536	0.0536	0.107		mg/Kg-dry	1	07/05/19 04:15 PM
Aroclor 1242	<0.0536	0.0536	0.107		mg/Kg-dry	1	07/05/19 04:15 PM
Aroclor 1248	<0.0536	0.0536	0.107		mg/Kg-dry	1	07/05/19 04:15 PM
Aroclor 1254	<0.0536	0.0536	0.107		mg/Kg-dry	1	07/05/19 04:15 PM
Aroclor 1260	<0.0536	0.0536	0.107		mg/Kg-dry	1	07/05/19 04:15 PM
Total PCBs	<0.0536	0.0536	0.107		mg/Kg-dry	1	07/05/19 04:15 PM
Surr: Decachlorobiphenyl	102	0	58-125		%REC	1	07/05/19 04:15 PM
Surr: Tetrachloro-m-xylene	98.7	0	40-130		%REC	1	07/05/19 04:15 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	8.23	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-09-2-2.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-08
Project No:	6-0141-11	**Collection Date:**	06/27/19 10:12 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0590	0.0590	0.118		mg/Kg-dry	1	07/05/19 04:41 PM
Aroclor 1221	<0.0590	0.0590	0.118		mg/Kg-dry	1	07/05/19 04:41 PM
Aroclor 1232	<0.0590	0.0590	0.118		mg/Kg-dry	1	07/05/19 04:41 PM
Aroclor 1242	<0.0590	0.0590	0.118		mg/Kg-dry	1	07/05/19 04:41 PM
Aroclor 1248	<0.0590	0.0590	0.118		mg/Kg-dry	1	07/05/19 04:41 PM
Aroclor 1254	1390	29.5	59.0		mg/Kg-dry	500	07/08/19 04:05 PM
Aroclor 1260	<0.0590	0.0590	0.118		mg/Kg-dry	1	07/05/19 04:41 PM
Total PCBs	<0.0590	0.0590	0.118		mg/Kg-dry	1	07/05/19 04:41 PM
Surr: Decachlorobiphenyl	3650000	0	58-125	S	%REC	500	07/08/19 04:05 PM
Surr: Decachlorobiphenyl	156	0	58-125	S	%REC	1	07/05/19 04:41 PM
Surr: Tetrachloro-m-xylene	168	0	40-130	S	%REC	500	07/08/19 04:05 PM
Surr: Tetrachloro-m-xylene	133	0	40-130	S	%REC	1	07/05/19 04:41 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.3	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-09-4-4.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-09
Project No:	6-0141-11	**Collection Date:**	06/27/19 10:17 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 05:06 PM
Aroclor 1221	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 05:06 PM
Aroclor 1232	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 05:06 PM
Aroclor 1242	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 05:06 PM
Aroclor 1248	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 05:06 PM
Aroclor 1254	27.4	0.588	1.18		mg/Kg-dry	10	07/08/19 05:46 PM
Aroclor 1260	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 05:06 PM
Total PCBs	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 05:06 PM
Surr: Decachlorobiphenyl	106	0	58-125		%REC	10	07/08/19 05:46 PM
Surr: Decachlorobiphenyl	96.8	0	58-125		%REC	1	07/05/19 05:06 PM
Surr: Tetrachloro-m-xylene	121	0	40-130		%REC	10	07/08/19 05:46 PM
Surr: Tetrachloro-m-xylene	93.5	0	40-130		%REC	1	07/05/19 05:06 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	18.2	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-10-0-1.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-10
Project No:	6-0141-11	**Collection Date:**	06/27/19 10:31 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0522	0.0522	0.104		mg/Kg-dry	1	07/05/19 05:31 PM
Aroclor 1221	<0.0522	0.0522	0.104		mg/Kg-dry	1	07/05/19 05:31 PM
Aroclor 1232	<0.0522	0.0522	0.104		mg/Kg-dry	1	07/05/19 05:31 PM
Aroclor 1242	<0.0522	0.0522	0.104		mg/Kg-dry	1	07/05/19 05:31 PM
Aroclor 1248	<0.0522	0.0522	0.104		mg/Kg-dry	1	07/05/19 05:31 PM
Aroclor 1254	<0.0522	0.0522	0.104		mg/Kg-dry	1	07/05/19 05:31 PM
Aroclor 1260	<0.0522	0.0522	0.104		mg/Kg-dry	1	07/05/19 05:31 PM
Total PCBs	<0.0522	0.0522	0.104		mg/Kg-dry	1	07/05/19 05:31 PM
Surr: Decachlorobiphenyl	75.5	0	58-125		%REC	1	07/05/19 05:31 PM
Surr: Tetrachloro-m-xylene	84.9	0	40-130		%REC	1	07/05/19 05:31 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	7.07	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-10-2-3'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-11
Project No:	6-0141-11	**Collection Date:**	06/27/19 10:35 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0627	0.0627	0.125		mg/Kg-dry	1	07/05/19 07:13 PM
Aroclor 1221	<0.0627	0.0627	0.125		mg/Kg-dry	1	07/05/19 07:13 PM
Aroclor 1232	<0.0627	0.0627	0.125		mg/Kg-dry	1	07/05/19 07:13 PM
Aroclor 1242	<0.0627	0.0627	0.125		mg/Kg-dry	1	07/05/19 07:13 PM
Aroclor 1248	<0.0627	0.0627	0.125		mg/Kg-dry	1	07/05/19 07:13 PM
Aroclor 1254	75.5	6.27	12.5		mg/Kg-dry	100	07/08/19 04:30 PM
Aroclor 1260	<0.0627	0.0627	0.125		mg/Kg-dry	1	07/05/19 07:13 PM
Total PCBs	<0.0627	0.0627	0.125		mg/Kg-dry	1	07/05/19 07:13 PM
Surr: Decachlorobiphenyl	729000	0	58-125	S	%REC	100	07/08/19 04:30 PM
Surr: Decachlorobiphenyl	88.3	0	58-125		%REC	1	07/05/19 07:13 PM
Surr: Tetrachloro-m-xylene	109	0	40-130		%REC	100	07/08/19 04:30 PM
Surr: Tetrachloro-m-xylene	81.9	0	40-130		%REC	1	07/05/19 07:13 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	21.4	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-10-4-4.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-12
Project No:	6-0141-11	**Collection Date:**	06/27/19 10:38 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 07:38 PM
Aroclor 1221	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 07:38 PM
Aroclor 1232	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 07:38 PM
Aroclor 1242	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 07:38 PM
Aroclor 1248	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 07:38 PM
Aroclor 1254	61.9	5.88	11.8		mg/Kg-dry	100	07/08/19 04:55 PM
Aroclor 1260	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 07:38 PM
Total PCBs	<0.0588	0.0588	0.118		mg/Kg-dry	1	07/05/19 07:38 PM
Surr: Decachlorobiphenyl	729000	0	58-125	S	%REC	100	07/08/19 04:55 PM
Surr: Decachlorobiphenyl	130	0	58-125	S	%REC	1	07/05/19 07:38 PM
Surr: Tetrachloro-m-xylene	142	0	40-130	S	%REC	100	07/08/19 04:55 PM
Surr: Tetrachloro-m-xylene	100	0	40-130		%REC	1	07/05/19 07:38 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	18.8	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-11-0-1'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-13
Project No:	6-0141-11	**Collection Date:**	06/27/19 10:54 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/05/19 08:03 PM
Aroclor 1221	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/05/19 08:03 PM
Aroclor 1232	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/05/19 08:03 PM
Aroclor 1242	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/05/19 08:03 PM
Aroclor 1248	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/05/19 08:03 PM
Aroclor 1254	1.76	0.0609	0.122		mg/Kg-dry	1	07/05/19 08:03 PM
Aroclor 1260	<0.0609	0.0609	0.122		mg/Kg-dry	1	07/05/19 08:03 PM
Total PCBs	1.76	0.0609	0.122		mg/Kg-dry	1	07/05/19 08:03 PM
Surr: Decachlorobiphenyl	63.2	0	58-125		%REC	1	07/05/19 08:03 PM
Surr: Tetrachloro-m-xylene	83.6	0	40-130		%REC	1	07/05/19 08:03 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.8	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-11-2-2.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-14
Project No:	6-0141-11	**Collection Date:**	06/27/19 10:59 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0580	0.0580	0.116		mg/Kg-dry	1	07/05/19 08:29 PM
Aroclor 1221	<0.0580	0.0580	0.116		mg/Kg-dry	1	07/05/19 08:29 PM
Aroclor 1232	<0.0580	0.0580	0.116		mg/Kg-dry	1	07/05/19 08:29 PM
Aroclor 1242	<0.0580	0.0580	0.116		mg/Kg-dry	1	07/05/19 08:29 PM
Aroclor 1248	<0.0580	0.0580	0.116		mg/Kg-dry	1	07/05/19 08:29 PM
Aroclor 1254	24.8	1.16	2.32		mg/Kg-dry	20	07/08/19 05:21 PM
Aroclor 1260	<0.0580	0.0580	0.116		mg/Kg-dry	1	07/05/19 08:29 PM
Total PCBs	<0.0580	0.0580	0.116		mg/Kg-dry	1	07/05/19 08:29 PM
Surr: Decachlorobiphenyl	101	0	58-125		%REC	20	07/08/19 05:21 PM
Surr: Decachlorobiphenyl	88.5	0	58-125		%REC	1	07/05/19 08:29 PM
Surr: Tetrachloro-m-xylene	151	0	40-130	S	%REC	20	07/08/19 05:21 PM
Surr: Tetrachloro-m-xylene	109	0	40-130		%REC	1	07/05/19 08:29 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	18.8	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-11-3-3.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-15
Project No:	6-0141-11	**Collection Date:**	06/27/19 11:03 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0593	0.0593	0.119		mg/Kg-dry	1	07/05/19 08:54 PM
Aroclor 1221	<0.0593	0.0593	0.119		mg/Kg-dry	1	07/05/19 08:54 PM
Aroclor 1232	<0.0593	0.0593	0.119		mg/Kg-dry	1	07/05/19 08:54 PM
Aroclor 1242	<0.0593	0.0593	0.119		mg/Kg-dry	1	07/05/19 08:54 PM
Aroclor 1248	<0.0593	0.0593	0.119		mg/Kg-dry	1	07/05/19 08:54 PM
Aroclor 1254	8.81	0.593	1.19		mg/Kg-dry	10	07/08/19 06:11 PM
Aroclor 1260	<0.0593	0.0593	0.119		mg/Kg-dry	1	07/05/19 08:54 PM
Total PCBs	<0.0593	0.0593	0.119		mg/Kg-dry	1	07/05/19 08:54 PM
Surr: Decachlorobiphenyl	48.3	0	58-125	S	%REC	10	07/08/19 06:11 PM
Surr: Decachlorobiphenyl	48.8	0	58-125	S	%REC	1	07/05/19 08:54 PM
Surr: Tetrachloro-m-xylene	73.8	0	40-130		%REC	10	07/08/19 06:11 PM
Surr: Tetrachloro-m-xylene	58.3	0	40-130		%REC	1	07/05/19 08:54 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	18.6	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-12-0-1.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-16
Project No:	6-0141-11	**Collection Date:**	06/27/19 11:25 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/05/19 09:19 PM
Aroclor 1221	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/05/19 09:19 PM
Aroclor 1232	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/05/19 09:19 PM
Aroclor 1242	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/05/19 09:19 PM
Aroclor 1248	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/05/19 09:19 PM
Aroclor 1254	0.141	0.0605	0.121		mg/Kg-dry	1	07/05/19 09:19 PM
Aroclor 1260	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/05/19 09:19 PM
Total PCBs	0.141	0.0605	0.121		mg/Kg-dry	1	07/05/19 09:19 PM
Surr: Decachlorobiphenyl	81.6	0	58-125		%REC	1	07/05/19 09:19 PM
Surr: Tetrachloro-m-xylene	96.6	0	40-130		%REC	1	07/05/19 09:19 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	22.9	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-12-2-3.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-17
Project No:	6-0141-11	**Collection Date:**	06/27/19 11:28 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0630	0.0630	0.126		mg/Kg-dry	1	07/05/19 09:45 PM
Aroclor 1221	<0.0630	0.0630	0.126		mg/Kg-dry	1	07/05/19 09:45 PM
Aroclor 1232	<0.0630	0.0630	0.126		mg/Kg-dry	1	07/05/19 09:45 PM
Aroclor 1242	<0.0630	0.0630	0.126		mg/Kg-dry	1	07/05/19 09:45 PM
Aroclor 1248	<0.0630	0.0630	0.126		mg/Kg-dry	1	07/05/19 09:45 PM
Aroclor 1254	4.99	0.0630	0.126		mg/Kg-dry	1	07/05/19 09:45 PM
Aroclor 1260	<0.0630	0.0630	0.126		mg/Kg-dry	1	07/05/19 09:45 PM
Total PCBs	4.99	0.0630	0.126		mg/Kg-dry	1	07/05/19 09:45 PM
Surr: Decachlorobiphenyl	61.1	0	58-125		%REC	1	07/05/19 09:45 PM
Surr: Tetrachloro-m-xylene	94.4	0	40-130		%REC	1	07/05/19 09:45 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	21.9	0	0		WT%	1	07/09/19 08:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-12-4-4.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-18
Project No:	6-0141-11	**Collection Date:**	06/27/19 11:31 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/05/19 10:10 PM
Aroclor 1221	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/05/19 10:10 PM
Aroclor 1232	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/05/19 10:10 PM
Aroclor 1242	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/05/19 10:10 PM
Aroclor 1248	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/05/19 10:10 PM
Aroclor 1254	3.10	0.0594	0.119		mg/Kg-dry	1	07/05/19 10:10 PM
Aroclor 1260	<0.0594	0.0594	0.119		mg/Kg-dry	1	07/05/19 10:10 PM
Total PCBs	3.10	0.0594	0.119		mg/Kg-dry	1	07/05/19 10:10 PM
Surr: Decachlorobiphenyl	67.8	0	58-125		%REC	1	07/05/19 10:10 PM
Surr: Tetrachloro-m-xylene	89.1	0	40-130		%REC	1	07/05/19 10:10 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	18.7	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-12-6-6.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-19
Project No:	6-0141-11	**Collection Date:**	06/27/19 11:35 AM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0629	0.0629	0.126		mg/Kg-dry	1	07/05/19 10:35 PM
Aroclor 1221	<0.0629	0.0629	0.126		mg/Kg-dry	1	07/05/19 10:35 PM
Aroclor 1232	<0.0629	0.0629	0.126		mg/Kg-dry	1	07/05/19 10:35 PM
Aroclor 1242	<0.0629	0.0629	0.126		mg/Kg-dry	1	07/05/19 10:35 PM
Aroclor 1248	<0.0629	0.0629	0.126		mg/Kg-dry	1	07/05/19 10:35 PM
Aroclor 1254	0.183	0.0629	0.126		mg/Kg-dry	1	07/05/19 10:35 PM
Aroclor 1260	<0.0629	0.0629	0.126		mg/Kg-dry	1	07/05/19 10:35 PM
Total PCBs	0.183	0.0629	0.126		mg/Kg-dry	1	07/05/19 10:35 PM
Surr: Decachlorobiphenyl	69.2	0	58-125		%REC	1	07/05/19 10:35 PM
Surr: Tetrachloro-m-xylene	97.8	0	40-130		%REC	1	07/05/19 10:35 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	23.2	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-13-0-0.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-20
Project No:	6-0141-11	**Collection Date:**	06/27/19 12:53 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0563	0.0563	0.113		mg/Kg-dry	1	07/05/19 11:00 PM
Aroclor 1221	<0.0563	0.0563	0.113		mg/Kg-dry	1	07/05/19 11:00 PM
Aroclor 1232	<0.0563	0.0563	0.113		mg/Kg-dry	1	07/05/19 11:00 PM
Aroclor 1242	<0.0563	0.0563	0.113		mg/Kg-dry	1	07/05/19 11:00 PM
Aroclor 1248	<0.0563	0.0563	0.113		mg/Kg-dry	1	07/05/19 11:00 PM
Aroclor 1254	0.107	0.0563	0.113	J	mg/Kg-dry	1	07/05/19 11:00 PM
Aroclor 1260	<0.0563	0.0563	0.113		mg/Kg-dry	1	07/05/19 11:00 PM
Total PCBs	0.107	0.0563	0.113	J	mg/Kg-dry	1	07/05/19 11:00 PM
Surr: Decachlorobiphenyl	73.9	0	58-125		%REC	1	07/05/19 11:00 PM
Surr: Tetrachloro-m-xylene	91.7	0	40-130		%REC	1	07/05/19 11:00 PM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	16.8	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-13-2-2.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-21
Project No:	6-0141-11	**Collection Date:**	06/27/19 12:58 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0565	0.0565	0.113		mg/Kg-dry	1	07/11/19 12:59 AM
Aroclor 1221	<0.0565	0.0565	0.113		mg/Kg-dry	1	07/11/19 12:59 AM
Aroclor 1232	<0.0565	0.0565	0.113		mg/Kg-dry	1	07/11/19 12:59 AM
Aroclor 1242	<0.0565	0.0565	0.113		mg/Kg-dry	1	07/11/19 12:59 AM
Aroclor 1248	<0.0565	0.0565	0.113		mg/Kg-dry	1	07/11/19 12:59 AM
Aroclor 1254	0.309	0.0565	0.113		mg/Kg-dry	1	07/11/19 12:59 AM
Aroclor 1260	<0.0565	0.0565	0.113		mg/Kg-dry	1	07/11/19 12:59 AM
Total PCBs	0.309	0.0565	0.113		mg/Kg-dry	1	07/11/19 12:59 AM
Surr: Decachlorobiphenyl	91.5	0	58-125		%REC	1	07/11/19 12:59 AM
Surr: Tetrachloro-m-xylene	80.5	0	40-130		%REC	1	07/11/19 12:59 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	17.8	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-13-3-4'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-22
Project No:	6-0141-11	**Collection Date:**	06/27/19 01:02 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0643	0.0643	0.129		mg/Kg-dry	1	07/11/19 01:25 AM
Aroclor 1221	<0.0643	0.0643	0.129		mg/Kg-dry	1	07/11/19 01:25 AM
Aroclor 1232	<0.0643	0.0643	0.129		mg/Kg-dry	1	07/11/19 01:25 AM
Aroclor 1242	<0.0643	0.0643	0.129		mg/Kg-dry	1	07/11/19 01:25 AM
Aroclor 1248	<0.0643	0.0643	0.129		mg/Kg-dry	1	07/11/19 01:25 AM
Aroclor 1254	<0.0643	0.0643	0.129		mg/Kg-dry	1	07/11/19 01:25 AM
Aroclor 1260	<0.0643	0.0643	0.129		mg/Kg-dry	1	07/11/19 01:25 AM
Total PCBs	<0.0643	0.0643	0.129		mg/Kg-dry	1	07/11/19 01:25 AM
Surr: Decachlorobiphenyl	52.9	0	58-125	S	%REC	1	07/11/19 01:25 AM
Surr: Tetrachloro-m-xylene	58.3	0	40-130		%REC	1	07/11/19 01:25 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	27.2	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-14-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-23
Project No:	6-0141-11	**Collection Date:**	06/27/19 01:18 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0538	0.0538	0.108		mg/Kg-dry	1	07/11/19 01:50 AM
Aroclor 1221	<0.0538	0.0538	0.108		mg/Kg-dry	1	07/11/19 01:50 AM
Aroclor 1232	<0.0538	0.0538	0.108		mg/Kg-dry	1	07/11/19 01:50 AM
Aroclor 1242	<0.0538	0.0538	0.108		mg/Kg-dry	1	07/11/19 01:50 AM
Aroclor 1248	<0.0538	0.0538	0.108		mg/Kg-dry	1	07/11/19 01:50 AM
Aroclor 1254	<0.0538	0.0538	0.108		mg/Kg-dry	1	07/11/19 01:50 AM
Aroclor 1260	<0.0538	0.0538	0.108		mg/Kg-dry	1	07/11/19 01:50 AM
Total PCBs	<0.0538	0.0538	0.108		mg/Kg-dry	1	07/11/19 01:50 AM
Surr: Decachlorobiphenyl	68.2	0	58-125		%REC	1	07/11/19 01:50 AM
Surr: Tetrachloro-m-xylene	66.0	0	40-130		%REC	1	07/11/19 01:50 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	12.1	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-14-2-2.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-24
Project No:	6-0141-11	**Collection Date:**	06/27/19 01:21 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0539	0.0539	0.108		mg/Kg-dry	1	07/11/19 02:15 AM
Aroclor 1221	<0.0539	0.0539	0.108		mg/Kg-dry	1	07/11/19 02:15 AM
Aroclor 1232	<0.0539	0.0539	0.108		mg/Kg-dry	1	07/11/19 02:15 AM
Aroclor 1242	<0.0539	0.0539	0.108		mg/Kg-dry	1	07/11/19 02:15 AM
Aroclor 1248	<0.0539	0.0539	0.108		mg/Kg-dry	1	07/11/19 02:15 AM
Aroclor 1254	<0.0539	0.0539	0.108		mg/Kg-dry	1	07/11/19 02:15 AM
Aroclor 1260	<0.0539	0.0539	0.108		mg/Kg-dry	1	07/11/19 02:15 AM
Total PCBs	<0.0539	0.0539	0.108		mg/Kg-dry	1	07/11/19 02:15 AM
Surr: Decachlorobiphenyl	80.6	0	58-125		%REC	1	07/11/19 02:15 AM
Surr: Tetrachloro-m-xylene	76.8	0	40-130		%REC	1	07/11/19 02:15 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	8.89	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-14-4-4.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-25
Project No:	6-0141-11	**Collection Date:**	06/27/19 01:24 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 02:41 AM
Aroclor 1221	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 02:41 AM
Aroclor 1232	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 02:41 AM
Aroclor 1242	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 02:41 AM
Aroclor 1248	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 02:41 AM
Aroclor 1254	7.52	0.603	1.21		mg/Kg-dry	10	07/12/19 12:39 PM
Aroclor 1260	<0.0603	0.0603	0.121		mg/Kg-dry	1	07/11/19 02:41 AM
Total PCBs	7.52	0.603	1.21		mg/Kg-dry	10	07/12/19 12:39 PM
Surr: Decachlorobiphenyl	87.8	0	58-125		%REC	10	07/12/19 12:39 PM
Surr: Decachlorobiphenyl	77.3	0	58-125		%REC	1	07/11/19 02:41 AM
Surr: Tetrachloro-m-xylene	93.6	0	40-130		%REC	10	07/12/19 12:39 PM
Surr: Tetrachloro-m-xylene	81.7	0	40-130		%REC	1	07/11/19 02:41 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	18.7	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-15-0-1.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-26
Project No:	6-0141-11	**Collection Date:**	06/27/19 01:33 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0528	0.0528	0.106		mg/Kg-dry	1	07/11/19 03:06 AM
Aroclor 1221	<0.0528	0.0528	0.106		mg/Kg-dry	1	07/11/19 03:06 AM
Aroclor 1232	<0.0528	0.0528	0.106		mg/Kg-dry	1	07/11/19 03:06 AM
Aroclor 1242	<0.0528	0.0528	0.106		mg/Kg-dry	1	07/11/19 03:06 AM
Aroclor 1248	0.310	0.0528	0.106		mg/Kg-dry	1	07/11/19 03:06 AM
Aroclor 1254	<0.0528	0.0528	0.106		mg/Kg-dry	1	07/11/19 03:06 AM
Aroclor 1260	<0.0528	0.0528	0.106		mg/Kg-dry	1	07/11/19 03:06 AM
Total PCBs	0.310	0.0528	0.106		mg/Kg-dry	1	07/11/19 03:06 AM
Surr: Decachlorobiphenyl	79.6	0	58-125		%REC	1	07/11/19 03:06 AM
Surr: Tetrachloro-m-xylene	75.5	0	40-130		%REC	1	07/11/19 03:06 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	7.41	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-15-2-2.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-27
Project No:	6-0141-11	**Collection Date:**	06/27/19 01:40 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0657	0.0657	0.131		mg/Kg-dry	1	07/11/19 03:31 AM
Aroclor 1221	<0.0657	0.0657	0.131		mg/Kg-dry	1	07/11/19 03:31 AM
Aroclor 1232	<0.0657	0.0657	0.131		mg/Kg-dry	1	07/11/19 03:31 AM
Aroclor 1242	<0.0657	0.0657	0.131		mg/Kg-dry	1	07/11/19 03:31 AM
Aroclor 1248	<0.0657	0.0657	0.131		mg/Kg-dry	1	07/11/19 03:31 AM
Aroclor 1254	9.57	0.328	0.657		mg/Kg-dry	5	07/12/19 01:04 PM
Aroclor 1260	<0.0657	0.0657	0.131		mg/Kg-dry	1	07/11/19 03:31 AM
Total PCBs	9.57	0.328	0.657		mg/Kg-dry	5	07/12/19 01:04 PM
Surr: Decachlorobiphenyl	62.9	0	58-125		%REC	5	07/12/19 01:04 PM
Surr: Decachlorobiphenyl	52.2	0	58-125	S	%REC	1	07/11/19 03:31 AM
Surr: Tetrachloro-m-xylene	65.2	0	40-130		%REC	5	07/12/19 01:04 PM
Surr: Tetrachloro-m-xylene	55.5	0	40-130		%REC	1	07/11/19 03:31 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	30.0	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-15-4-4.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-28
Project No:	6-0141-11	**Collection Date:**	06/27/19 01:44 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 03:57 AM
Aroclor 1221	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 03:57 AM
Aroclor 1232	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 03:57 AM
Aroclor 1242	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 03:57 AM
Aroclor 1248	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 03:57 AM
Aroclor 1254	59.5	2.97	5.95		mg/Kg-dry	50	07/12/19 01:30 PM
Aroclor 1260	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 03:57 AM
Total PCBs	59.5	2.97	5.95		mg/Kg-dry	50	07/12/19 01:30 PM
Surr: Decachlorobiphenyl	364000	0	58-125	S	%REC	50	07/12/19 01:30 PM
Surr: Decachlorobiphenyl	84.5	0	58-125		%REC	1	07/11/19 03:57 AM
Surr: Tetrachloro-m-xylene	83.1	0	40-130		%REC	50	07/12/19 01:30 PM
Surr: Tetrachloro-m-xylene	79.9	0	40-130		%REC	1	07/11/19 03:57 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	17.7	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-16-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-29
Project No:	6-0141-11	**Collection Date:**	06/27/19 02:09 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 04:22 AM
Aroclor 1221	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 04:22 AM
Aroclor 1232	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 04:22 AM
Aroclor 1242	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 04:22 AM
Aroclor 1248	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 04:22 AM
Aroclor 1254	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 04:22 AM
Aroclor 1260	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 04:22 AM
Total PCBs	<0.0519	0.0519	0.104		mg/Kg-dry	1	07/11/19 04:22 AM
Surr: Decachlorobiphenyl	82.8	0	58-125		%REC	1	07/11/19 04:22 AM
Surr: Tetrachloro-m-xylene	75.6	0	40-130		%REC	1	07/11/19 04:22 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	5.52	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-16-2-2.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-30
Project No:	6-0141-11	**Collection Date:**	06/27/19 02:14 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 04:47 AM
Aroclor 1221	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 04:47 AM
Aroclor 1232	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 04:47 AM
Aroclor 1242	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 04:47 AM
Aroclor 1248	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 04:47 AM
Aroclor 1254	976	29.8	59.6		mg/Kg-dry	500	07/12/19 02:46 PM
Aroclor 1260	<0.0596	0.0596	0.119		mg/Kg-dry	1	07/11/19 04:47 AM
Total PCBs	976	29.8	59.6		mg/Kg-dry	500	07/12/19 02:46 PM
Surr: Decachlorobiphenyl	3650000	0	58-125	S	%REC	500	07/12/19 02:46 PM
Surr: Decachlorobiphenyl	493	0	58-125	S	%REC	1	07/11/19 04:47 AM
Surr: Tetrachloro-m-xylene	0	0	40-130	S	%REC	500	07/12/19 02:46 PM
Surr: Tetrachloro-m-xylene	0	0	40-130	S	%REC	1	07/11/19 04:47 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.1	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-16-4-4.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-31
Project No:	6-0141-11	**Collection Date:**	06/27/19 02:17 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/11/19 06:29 AM
Aroclor 1221	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/11/19 06:29 AM
Aroclor 1232	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/11/19 06:29 AM
Aroclor 1242	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/11/19 06:29 AM
Aroclor 1248	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/11/19 06:29 AM
Aroclor 1254	31.1	1.21	2.42		mg/Kg-dry	20	07/12/19 03:11 PM
Aroclor 1260	<0.0605	0.0605	0.121		mg/Kg-dry	1	07/11/19 06:29 AM
Total PCBs	31.1	1.21	2.42		mg/Kg-dry	20	07/12/19 03:11 PM
Surr: Decachlorobiphenyl	68.3	0	58-125		%REC	20	07/12/19 03:11 PM
Surr: Decachlorobiphenyl	117	0	58-125		%REC	1	07/11/19 06:29 AM
Surr: Tetrachloro-m-xylene	93.7	0	40-130		%REC	20	07/12/19 03:11 PM
Surr: Tetrachloro-m-xylene	79.8	0	40-130		%REC	1	07/11/19 06:29 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.4	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-17-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-32
Project No:	6-0141-11	**Collection Date:**	06/27/19 02:36 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0544	0.0544	0.109		mg/Kg-dry	1	07/11/19 06:54 AM
Aroclor 1221	<0.0544	0.0544	0.109		mg/Kg-dry	1	07/11/19 06:54 AM
Aroclor 1232	<0.0544	0.0544	0.109		mg/Kg-dry	1	07/11/19 06:54 AM
Aroclor 1242	<0.0544	0.0544	0.109		mg/Kg-dry	1	07/11/19 06:54 AM
Aroclor 1248	<0.0544	0.0544	0.109		mg/Kg-dry	1	07/11/19 06:54 AM
Aroclor 1254	<0.0544	0.0544	0.109		mg/Kg-dry	1	07/11/19 06:54 AM
Aroclor 1260	<0.0544	0.0544	0.109		mg/Kg-dry	1	07/11/19 06:54 AM
Total PCBs	<0.0544	0.0544	0.109		mg/Kg-dry	1	07/11/19 06:54 AM
Surr: Decachlorobiphenyl	49.0	0	58-125	S	%REC	1	07/11/19 06:54 AM
Surr: Tetrachloro-m-xylene	55.5	0	40-130		%REC	1	07/11/19 06:54 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	11.9	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-17-2-2.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-33
Project No:	6-0141-11	**Collection Date:**	06/27/19 02:39 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 07:19 AM
Aroclor 1221	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 07:19 AM
Aroclor 1232	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 07:19 AM
Aroclor 1242	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 07:19 AM
Aroclor 1248	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 07:19 AM
Aroclor 1254	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 07:19 AM
Aroclor 1260	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 07:19 AM
Total PCBs	<0.0595	0.0595	0.119		mg/Kg-dry	1	07/11/19 07:19 AM
Surr: Decachlorobiphenyl	78.2	0	58-125		%REC	1	07/11/19 07:19 AM
Surr: Tetrachloro-m-xylene	64.2	0	40-130		%REC	1	07/11/19 07:19 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.7	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-17-4-4.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-34
Project No:	6-0141-11	**Collection Date:**	06/27/19 02:44 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/11/19 07:45 AM
Aroclor 1221	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/11/19 07:45 AM
Aroclor 1232	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/11/19 07:45 AM
Aroclor 1242	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/11/19 07:45 AM
Aroclor 1248	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/11/19 07:45 AM
Aroclor 1254	0.166	0.0582	0.116		mg/Kg-dry	1	07/11/19 07:45 AM
Aroclor 1260	<0.0582	0.0582	0.116		mg/Kg-dry	1	07/11/19 07:45 AM
Total PCBs	0.166	0.0582	0.116		mg/Kg-dry	1	07/11/19 07:45 AM
Surr: Decachlorobiphenyl	66.6	0	58-125		%REC	1	07/11/19 07:45 AM
Surr: Tetrachloro-m-xylene	63.0	0	40-130		%REC	1	07/11/19 07:45 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	20.6	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-18-0-1.75'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-35
Project No:	6-0141-11	**Collection Date:**	06/27/19 02:59 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0701	0.0701	0.140		mg/Kg-dry	1	07/11/19 08:10 AM
Aroclor 1221	<0.0701	0.0701	0.140		mg/Kg-dry	1	07/11/19 08:10 AM
Aroclor 1232	<0.0701	0.0701	0.140		mg/Kg-dry	1	07/11/19 08:10 AM
Aroclor 1242	<0.0701	0.0701	0.140		mg/Kg-dry	1	07/11/19 08:10 AM
Aroclor 1248	<0.0701	0.0701	0.140		mg/Kg-dry	1	07/11/19 08:10 AM
Aroclor 1254	0.0803	0.0701	0.140	J	mg/Kg-dry	1	07/11/19 08:10 AM
Aroclor 1260	<0.0701	0.0701	0.140		mg/Kg-dry	1	07/11/19 08:10 AM
Total PCBs	0.0803	0.0701	0.140	J	mg/Kg-dry	1	07/11/19 08:10 AM
Surr: Decachlorobiphenyl	33.1	0	58-125	S	%REC	1	07/11/19 08:10 AM
Surr: Tetrachloro-m-xylene	42.5	0	40-130		%REC	1	07/11/19 08:10 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	32.3	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-18-2-2.25'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-36
Project No:	6-0141-11	**Collection Date:**	06/27/19 03:02 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0574	0.0574	0.115		mg/Kg-dry	1	07/11/19 08:35 AM
Aroclor 1221	<0.0574	0.0574	0.115		mg/Kg-dry	1	07/11/19 08:35 AM
Aroclor 1232	<0.0574	0.0574	0.115		mg/Kg-dry	1	07/11/19 08:35 AM
Aroclor 1242	<0.0574	0.0574	0.115		mg/Kg-dry	1	07/11/19 08:35 AM
Aroclor 1248	<0.0574	0.0574	0.115		mg/Kg-dry	1	07/11/19 08:35 AM
Aroclor 1254	<0.0574	0.0574	0.115		mg/Kg-dry	1	07/11/19 08:35 AM
Aroclor 1260	<0.0574	0.0574	0.115		mg/Kg-dry	1	07/11/19 08:35 AM
Total PCBs	<0.0574	0.0574	0.115		mg/Kg-dry	1	07/11/19 08:35 AM
Surr: Decachlorobiphenyl	86.5	0	58-125		%REC	1	07/11/19 08:35 AM
Surr: Tetrachloro-m-xylene	74.1	0	40-130		%REC	1	07/11/19 08:35 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.4	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-18-4-4.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-37
Project No:	6-0141-11	**Collection Date:**	06/27/19 03:05 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/11/19 09:01 AM
Aroclor 1221	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/11/19 09:01 AM
Aroclor 1232	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/11/19 09:01 AM
Aroclor 1242	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/11/19 09:01 AM
Aroclor 1248	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/11/19 09:01 AM
Aroclor 1254	0.0755	0.0607	0.121	J	mg/Kg-dry	1	07/11/19 09:01 AM
Aroclor 1260	<0.0607	0.0607	0.121		mg/Kg-dry	1	07/11/19 09:01 AM
Total PCBs	0.0755	0.0607	0.121	J	mg/Kg-dry	1	07/11/19 09:01 AM
Surr: Decachlorobiphenyl	86.9	0	58-125		%REC	1	07/11/19 09:01 AM
Surr: Tetrachloro-m-xylene	75.9	0	40-130		%REC	1	07/11/19 09:01 AM
PERCENT MOISTURE		**D2216**					Analyst: **BM**
Percent Moisture	19.5	0	0		WT%	1	07/09/19 11:38 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-19-0-1'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-38
Project No:	6-0141-11	**Collection Date:**	06/27/19 03:24 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0514	0.0514	0.103		mg/Kg-dry	1	07/11/19 09:26 AM
Aroclor 1221	<0.0514	0.0514	0.103		mg/Kg-dry	1	07/11/19 09:26 AM
Aroclor 1232	<0.0514	0.0514	0.103		mg/Kg-dry	1	07/11/19 09:26 AM
Aroclor 1242	<0.0514	0.0514	0.103		mg/Kg-dry	1	07/11/19 09:26 AM
Aroclor 1248	<0.0514	0.0514	0.103		mg/Kg-dry	1	07/11/19 09:26 AM
Aroclor 1254	0.412	0.0514	0.103		mg/Kg-dry	1	07/11/19 09:26 AM
Aroclor 1260	<0.0514	0.0514	0.103		mg/Kg-dry	1	07/11/19 09:26 AM
Total PCBs	0.412	0.0514	0.103		mg/Kg-dry	1	07/11/19 09:26 AM
Surr: Decachlorobiphenyl	74.7	0	58-125		%REC	1	07/11/19 09:26 AM
Surr: Tetrachloro-m-xylene	79.4	0	40-130		%REC	1	07/11/19 09:26 AM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	9.72	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-19-2-2.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-39
Project No:	6-0141-11	**Collection Date:**	06/27/19 03:28 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/11/19 11:58 AM
Aroclor 1221	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/11/19 11:58 AM
Aroclor 1232	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/11/19 11:58 AM
Aroclor 1242	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/11/19 11:58 AM
Aroclor 1248	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/11/19 11:58 AM
Aroclor 1254	2.48	0.0570	0.114		mg/Kg-dry	1	07/11/19 11:58 AM
Aroclor 1260	<0.0570	0.0570	0.114		mg/Kg-dry	1	07/11/19 11:58 AM
Total PCBs	2.48	0.0570	0.114		mg/Kg-dry	1	07/11/19 11:58 AM
Surr: Decachlorobiphenyl	62.4	0	58-125		%REC	1	07/11/19 11:58 AM
Surr: Tetrachloro-m-xylene	72.3	0	40-130		%REC	1	07/11/19 11:58 AM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	13.5	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-20-0-1.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-40
Project No:	6-0141-11	**Collection Date:**	06/27/19 03:37 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0507	0.0507	0.101		mg/Kg-dry	1	07/11/19 12:23 PM
Aroclor 1221	<0.0507	0.0507	0.101		mg/Kg-dry	1	07/11/19 12:23 PM
Aroclor 1232	<0.0507	0.0507	0.101		mg/Kg-dry	1	07/11/19 12:23 PM
Aroclor 1242	<0.0507	0.0507	0.101		mg/Kg-dry	1	07/11/19 12:23 PM
Aroclor 1248	<0.0507	0.0507	0.101		mg/Kg-dry	1	07/11/19 12:23 PM
Aroclor 1254	<0.0507	0.0507	0.101		mg/Kg-dry	1	07/11/19 12:23 PM
Aroclor 1260	<0.0507	0.0507	0.101		mg/Kg-dry	1	07/11/19 12:23 PM
Total PCBs	<0.0507	0.0507	0.101		mg/Kg-dry	1	07/11/19 12:23 PM
Surr: Decachlorobiphenyl	83.6	0	58-125		%REC	1	07/11/19 12:23 PM
Surr: Tetrachloro-m-xylene	79.1	0	40-130		%REC	1	07/11/19 12:23 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	6.81	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-20-2-3'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-41
Project No:	6-0141-11	**Collection Date:**	06/27/19 03:41 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/11/19 12:48 PM
Aroclor 1221	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/11/19 12:48 PM
Aroclor 1232	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/11/19 12:48 PM
Aroclor 1242	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/11/19 12:48 PM
Aroclor 1248	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/11/19 12:48 PM
Aroclor 1254	1.20	0.0612	0.122		mg/Kg-dry	1	07/11/19 12:48 PM
Aroclor 1260	<0.0612	0.0612	0.122		mg/Kg-dry	1	07/11/19 12:48 PM
Total PCBs	1.20	0.0612	0.122		mg/Kg-dry	1	07/11/19 12:48 PM
Surr: Decachlorobiphenyl	87.2	0	58-125		%REC	1	07/11/19 12:48 PM
Surr: Tetrachloro-m-xylene	78.9	0	40-130		%REC	1	07/11/19 12:48 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	21.4	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc.

Date: *16-Jul-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	10-20-4-4.5'
Project:	Empire ABO/EA-10	**Lab ID:**	1907012-42
Project No:	6-0141-11	**Collection Date:**	06/27/19 03:46 PM
Lab Order:	1907012	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0583	0.0583	0.117		mg/Kg-dry	1	07/11/19 01:14 PM
Aroclor 1221	<0.0583	0.0583	0.117		mg/Kg-dry	1	07/11/19 01:14 PM
Aroclor 1232	<0.0583	0.0583	0.117		mg/Kg-dry	1	07/11/19 01:14 PM
Aroclor 1242	<0.0583	0.0583	0.117		mg/Kg-dry	1	07/11/19 01:14 PM
Aroclor 1248	<0.0583	0.0583	0.117		mg/Kg-dry	1	07/11/19 01:14 PM
Aroclor 1254	<0.0583	0.0583	0.117		mg/Kg-dry	1	07/11/19 01:14 PM
Aroclor 1260	<0.0583	0.0583	0.117		mg/Kg-dry	1	07/11/19 01:14 PM
Total PCBs	<0.0583	0.0583	0.117		mg/Kg-dry	1	07/11/19 01:14 PM
Surr: Decachlorobiphenyl	91.0	0	58-125		%REC	1	07/11/19 01:14 PM
Surr: Tetrachloro-m-xylene	79.7	0	40-130		%REC	1	07/11/19 01:14 PM
PERCENT MOISTURE		**D2216**					Analyst: **JS**
Percent Moisture	19.9	0	0		WT%	1	07/11/19 09:00 AM

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

DHL Analytical, Inc. **Date:** *16-Jul-19*

CLIENT: Larson & Associates
Work Order: 1907012
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190705A

The QC data in batch 91635 applies to the following samples: 1907012-01A, 1907012-02A, 1907012-03A, 1907012-04A, 1907012-05A, 1907012-06A, 1907012-07A, 1907012-08A, 1907012-09A, 1907012-10A, 1907012-11A, 1907012-12A, 1907012-13A, 1907012-14A, 1907012-15A, 1907012-16A, 1907012-17A, 1907012-18A, 1907012-19A, 1907012-20A

Sample ID **LCS-91635** Batch ID: **91635** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_190705A** Analysis Date: **7/5/2019 12:53:00 PM** Prep Date: **7/3/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.836	0.100	1.000	0	83.6	41	138			
Aroclor 1260	0.869	0.100	1.000	0	86.9	61	131			
Surr: Decachlorobiphenyl	0.0919		0.1000		91.9	58	125			
Surr: Tetrachloro-m-xylene	0.0956		0.1000		95.6	40	130			

Sample ID **MB-91635** Batch ID: **91635** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_190705A** Analysis Date: **7/5/2019 1:18:00 PM** Prep Date: **7/3/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0849		0.1000		84.9	58	125			
Surr: Tetrachloro-m-xylene	0.0810		0.1000		81.0	40	130			

Sample ID **1907012-01AMS** Batch ID: **91635** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC16_190705A** Analysis Date: **7/5/2019 5:57:00 PM** Prep Date: **7/3/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.08	0.112	1.116	0	97.0	41	138			
Aroclor 1260	1.13	0.112	1.116	0	101	61	131			
Surr: Decachlorobiphenyl	0.0885		0.1116		79.3	58	125			
Surr: Tetrachloro-m-xylene	0.112		0.1116		100	40	130			

Sample ID **1907012-01AMSD** Batch ID: **91635** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC16_190705A** Analysis Date: **7/5/2019 6:22:00 PM** Prep Date: **7/3/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.24	0.112	1.123	0	110	41	138	13.5	50	
Aroclor 1260	1.41	0.112	1.123	0	125	61	131	21.8	50	
Surr: Decachlorobiphenyl	0.120		0.1123		107	58	125	0		
Surr: Tetrachloro-m-xylene	0.115		0.1123		102	40	130	0		

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907012
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190708A

The QC data in batch 91635 applies to the following samples: 1907012-01A, 1907012-02A, 1907012-03A, 1907012-04A, 1907012-05A, 1907012-06A, 1907012-07A, 1907012-08A, 1907012-09A, 1907012-10A, 1907012-11A, 1907012-12A, 1907012-13A, 1907012-14A, 1907012-15A, 1907012-16A, 1907012-17A, 1907012-18A, 1907012-19A, 1907012-20A

Sample ID	**SB-190708**	Batch ID:	**91635**	TestNo:	**SW8082A**	Units:	**mg/Kg**
SampType:	**SBLK**	Run ID:	**GC16_190708A**	Analysis Date:	**7/8/2019 3:39:00 PM**	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1254	<0.0500	0.100	0							

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907012
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190710A

The QC data in batch 91710 applies to the following samples: 1907012-21A, 1907012-22A, 1907012-23A, 1907012-24A, 1907012-25A, 1907012-26A, 1907012-27A, 1907012-28A, 1907012-29A, 1907012-30A, 1907012-31A, 1907012-32A, 1907012-33A, 1907012-34A, 1907012-35A, 1907012-36A, 1907012-37A, 1907012-38A

Sample ID **LCS-91710** Batch ID: **91710** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_190710A** Analysis Date: **7/11/2019 12:09:00 AM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.803	0.100	1.000	0	80.3	41	138			
Aroclor 1260	0.866	0.100	1.000	0	86.6	61	131			
Surr: Decachlorobiphenyl	0.102		0.1000		102	58	125			
Surr: Tetrachloro-m-xylene	0.0899		0.1000		89.9	40	130			

Sample ID **MB-91710** Batch ID: **91710** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_190710A** Analysis Date: **7/11/2019 12:34:00 AM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0886		0.1000		88.6	58	125			
Surr: Tetrachloro-m-xylene	0.0791		0.1000		79.1	40	130			

Sample ID **1907012-21AMS** Batch ID: **91710** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC16_190710A** Analysis Date: **7/11/2019 5:13:00 AM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.954	0.114	1.137	0	83.8	41	138			
Aroclor 1260	1.04	0.114	1.137	0	91.4	61	131			
Surr: Decachlorobiphenyl	0.105		0.1137		92.4	58	125			
Surr: Tetrachloro-m-xylene	0.0966		0.1137		85.0	40	130			

Sample ID **1907012-21AMSD** Batch ID: **91710** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC16_190710A** Analysis Date: **7/11/2019 5:38:00 AM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.852	0.111	1.114	0	76.4	41	138	11.3	50	
Aroclor 1260	0.909	0.111	1.114	0	81.5	61	131	13.4	50	
Surr: Decachlorobiphenyl	0.0932		0.1114		83.6	58	125	0		
Surr: Tetrachloro-m-xylene	0.0852		0.1114		76.5	40	130	0		

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907012
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_190710A

The QC data in batch 91725 applies to the following samples: 1907012-39A, 1907012-40A, 1907012-41A, 1907012-42A

Sample ID **LCS-91725** Batch ID: **91725** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_190710A** Analysis Date: **7/11/2019 11:07:00 AM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.557	0.100	1.000	0	55.7	41	138			
Aroclor 1260	0.608	0.100	1.000	0	60.8	61	131			
Surr: Decachlorobiphenyl	0.0655		0.1000		65.5	58	125			
Surr: Tetrachloro-m-xylene	0.0571		0.1000		57.1	40	130			

Sample ID **MB-91725** Batch ID: **91725** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_190710A** Analysis Date: **7/11/2019 11:32:00 AM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0933		0.1000		93.3	58	125			
Surr: Tetrachloro-m-xylene	0.0788		0.1000		78.8	40	130			

Sample ID **1907012-39AMS** Batch ID: **91725** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC16_190710A** Analysis Date: **7/11/2019 4:11:00 PM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.14	0.109	1.087	0	105	41	138			
Aroclor 1260	1.25	0.109	1.087	0	114	61	131			
Surr: Decachlorobiphenyl	0.0594		0.1087		54.6	58	125			S
Surr: Tetrachloro-m-xylene	0.0705		0.1087		64.8	40	130			

Sample ID **1907012-39AMSD** Batch ID: **91725** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC16_190710A** Analysis Date: **7/11/2019 4:37:00 PM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.18	0.112	1.118	0	106	41	138	3.80	50	
Aroclor 1260	1.28	0.112	1.118	0	115	61	131	2.94	50	
Surr: Decachlorobiphenyl	0.0757		0.1118		67.7	58	125	0		
Surr: Tetrachloro-m-xylene	0.0827		0.1118		73.9	40	130	0		

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907012
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190708A**

The QC data in batch 91687 applies to the following samples: 1907012-01A, 1907012-02A, 1907012-03A, 1907012-04A, 1907012-05A, 1907012-06A, 1907012-07A, 1907012-08A, 1907012-09A, 1907012-10A, 1907012-11A, 1907012-12A, 1907012-13A, 1907012-14A, 1907012-15A, 1907012-16A, 1907012-17A

Sample ID **1907077-01A-DUP** Batch ID: **91687** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190708A** Analysis Date: **7/9/2019 8:38:00 AM** Prep Date: **7/8/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	23.9	0	0	23.88				0.000	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907012
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190708B**

The QC data in batch 91688 applies to the following samples: 1907012-18A, 1907012-19A, 1907012-20A, 1907012-21A, 1907012-22A, 1907012-23A, 1907012-24A, 1907012-25A, 1907012-26A, 1907012-27A, 1907012-28A, 1907012-29A, 1907012-30A, 1907012-31A, 1907012-32A, 1907012-33A, 1907012-34A, 1907012-35A, 1907012-36A, 1907012-37A

Sample ID **1907012-20A-DUP** Batch ID: **91688** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190708B** Analysis Date: **7/9/2019 11:38:00 AM** Prep Date: **7/8/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	17.6	0	0	16.79				5.00	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1907012
Project: Empire ABO/EA-10

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190710A**

The QC data in batch 91729 applies to the following samples: 1907012-38A, 1907012-39A, 1907012-40A, 1907012-41A, 1907012-42A

Sample ID **1907017-28A-DUP** Batch ID: **91729** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_190710A** Analysis Date: **7/11/2019 9:00:00 AM** Prep Date: **7/10/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	10.7	0	0	10.60				1.34	30	

Qualifiers:

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

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DEXSIL CORPORATION
ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

CERTIFICATE OF ANALYSIS

Larson & Associates
507 N. Marienfeld St., Suite 205
Midland, TX 79701

ATTN: Mark J. Larson

Customer ID#: C-1
DATS# 10407
P.O. #:
Sample Type: Concrete

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample, as received, was tested for the listed analytes using the noted method(s).

Method	Analyte	Result	Detection Limit
EPA 8082	PCBs	51.2 ppm(Aroclor 1254)	0.05 ppm

Samples Received:
06-18-19

Samples Analyzed:
06-26-19

Andrew C. Lynn, Chemist
06-27-19

Approved Public Health Laboratory # PH0529
ISO 9001:2015 Registered Corporation CERT-0106975

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DEXSIL CORPORATION
ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

CERTIFICATE OF ANALYSIS

Larson & Associates
507 N. Marienfeld St., Suite 205
Midland, TX 79701

ATTN: Mark J. Larson

Customer ID#: Comp - 1
DATS# 10407
P.O. #:
Sample Type: Concrete

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample, as received, was tested for the listed analytes using the noted method(s).

Method	Analyte	Result	Detection Limit
EPA 8082	PCBs	0.943 ppm(Aroclor 1254)	0.09 ppm

Samples Received:
06-18-19

Samples Analyzed:
06-26-19

DEXSIL

Andrew C. Lynn, Chemist
06-27-19

Approved Public Health Laboratory # PH0529
ISO 9001:2015 Registered Corporation CERT-0106975

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DEXSIL CORPORATION
ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

CERTIFICATE OF ANALYSIS

Larson & Associates
507 N. Marienfeld St., Suite 205
Midland, TX 79701

ATTN: Mark J. Larson

Customer ID#: Comp - 2
DATS# 10407
P.O. #:
Sample Type: Concrete

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample, as received, was tested for the listed analytes using the noted method(s).

Method	Analyte	Result	Detection Limit
EPA 8082	PCBs	1.06 ppm(Aroclor 1254)	0.08 ppm

Samples Received:
06-18-19

Samples Analyzed:
06-26-19

Andrew C. Lynn, Chemist
06-27-19

Approved Public Health Laboratory # PH0529
ISO 9001:2015 Registered Corporation CERT-0106975

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ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

CERTIFICATE OF ANALYSIS

Larson & Associates
507 N. Marienfeld St., Suite 205
Midland, TX 79701

ATTN: Mark J. Larson

Customer ID#: Comp #3
DATS# 10415
P.O. #:
Sample Type: Concrete

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample, as received, was tested for the listed analytes using the noted method(s).

Method	Analyte	Result	Detection Limit
EPA 8082	PCBs	0.219 ppm(Aroclor 1254)	0.05 ppm

Samples Received:
07-02-19

Samples Analyzed:
07-12-19

Andrew C. Lynn, Chemist
07-12-19

Approved Public Health Laboratory # PH0529
ISO 9001:2015 Registered Corporation CERT-0106975

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DEXSIL CORPORATION
ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

CERTIFICATE OF ANALYSIS

Larson & Associates
507 N. Marienfeld St., Suite 205
Midland, TX 79701

ATTN: Mark J. Larson

Customer ID#: Comp #4
DATS# 10415
P.O. #:
Sample Type: Concrete

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample, as received, was tested for the listed analytes using the noted method(s).

Method	Analyte	Result	Detection Limit
EPA 8082	PCBs	0.067 ppm(Aroclor 1254)	0.05 ppm

Samples Received:
07-02-19

Samples Analyzed:
07-12-19

DEXSIL

Andrew C. Lynn, Chemist
07-12-19

Approved Public Health Laboratory # PH0529
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DEXSIL CORPORATION
ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

CERTIFICATE OF ANALYSIS

Larson & Associates
507 N. Marienfeld St., Suite 205
Midland, TX 79701

ATTN: Mark J. Larson

Customer ID#: Comp #3
DATS# 10415
P.O. #:
Sample Type: Concrete

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample, as received, was tested for the listed analytes using the noted method(s).

Method	Analyte	Result	Detection Limit
EPA 8082	PCBs	0.219 ppm(Aroclor 1254)	0.05 ppm

Samples Received:
07-02-19

Samples Analyzed:
07-12-19

DEXSIL

Andrew C. Lynn, Chemist
07-12-19

Approved Public Health Laboratory # PH0529
ISO 9001:2015 Registered Corporation CERT-0106975

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ANALYTICAL LABORATORY
ONE HAMDEN PARK DRIVE
HAMDEN, CT 06517
(203)288-3509

CERTIFICATE OF ANALYSIS

Larson & Associates
507 N. Marienfeld St., Suite 205
Midland, TX 79701

ATTN: Mark J. Larson

Customer ID#: Comp #4
DATS# 10415
P.O. #:
Sample Type: Concrete

CERTIFICATION:

Dexsil Corporation hereby certifies that the following sample, as received, was tested for the listed analytes using the noted method(s).

Method	Analyte	Result	Detection Limit
EPA 8082	PCBs	0.067 ppm(Aroclor 1254)	0.05 ppm

Samples Received:
07-02-19

Samples Analyzed:
07-12-19

DEXSIL

Andrew C. Lynn, Chemist
07-12-19

Approved Public Health Laboratory # PH0529
ISO 9001:2015 Registered Corporation CERT-0106975

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October 29, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1910147

RE: Empire ABO/Clark Bldg

Dear Mark Larson:

DHL Analytical, Inc. received 28 sample(s) on 10/16/2019 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAP except where noted in the Case Narrative. All non-NELAP methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of New Mexico Laboratory Certification Number:

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№ 0797

CHAIN-OF-CUSTODY

Aarson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 10-14-2019 PAGE 1 OF 2

PO#: LAB WORK ORDER#: 1910147

PROJECT LOCATION OR NAME: Empire Abo / Clark Bldg

LAI PROJECT #: 6-0141-12 COLLECTOR:

Data Reported to: Mark Larson

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: Mtn / NM

S=SOIL W=WATER A=AIR P=PAINT SL=SLUDGE OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
C-1, 0.5'	01	10/14/19	07:45	S	3				X		BTEX ☐ MTBE ☐ TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☒ DIESEL - MOD 8015 ☒ OIL - MOD 8015 ☒ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☒ TBLP - METALS (RCRA) ☐ TCLP VOC ☐ TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ TOTAL METALS (RCRA) ☒ OTHER LIST ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐	
~~C-1, 1'~~												No Sample
C-2, 0.5'	02	10/14/19	07:35	S	3				X			
C-2, 1'	03		07:38									
C-3 0.5'	04		07:50									
C-3, 1.0'	05		07:55									
C-4, 0.5'	06		07:55									
C-5, 0.5'	07		08:10									
C-6, 0.5'	08		08:05									
C-6, 1.0'	09		08:09									
C-7, 0.5'	10		08:22									
C-7, 1.0'	11		08:25									
C-8, 0.5'	12		08:20									
C-9, 0.5'	13		08:50									
C-9, 1.0'	14	↓	08:52	↓	↓				↓		↓	
TOTAL												

RELINQUISHED BY:(Signature) DATE/TIME 10/15/19 15:45 RECEIVED BY: (Signature)

RELINQUISHED BY:(Signature) DATE/TIME 10/16/19 0820 RECEIVED BY: (Signature)

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

LABORATORY: DHL

TURN-AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 2.4°C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☒ INTACT ☐ NOT USED
☒ CARRIER BILL # Lone Star
☒ HAND DELIVERED

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№ 0798

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

DATE: 10-14-2019 PAGE 2 OF 2

PO#: LAB WORK ORDER#: 19 10 147

PROJECT LOCATION OR NAME: Empire Abo / Clark Bldg

LAI PROJECT #: 6-01121-12 COLLECTOR: ML

Data Reported to: Mark Larson

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: Mtn/NM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES	FIELD NOTES
C-10.05'	15	10/12/19	08:55	S	3				X		BTEX ☑ MTBE ☐ TRPH 418.1 ☐ TPH 1005 ☐ TPH 1006 ☐ GASOLINE MOD 8015 ☐ DIESEL - MOD 8015 ☐ OIL - MOD 8015 ☐ VOC 8260 ☐ SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ 8082 PCBS ☐ TBLP - METALS (RCRA) ☐ TCLP VOC ☐ TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ TOTAL METALS (RCRA) ☐ OTHER LIST ☐ LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ RCI ☐ TOX ☐ FLASHPOINT ☐ TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ pH ☐ HEXAVALENT CHROMIUM ☐ EXPLOSIVES ☐ PECHLORATE ☐ CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐	
Trip Blank 1	16											Hold Per Mark L. 10/16/19
TOTAL												

RELINQUISHED BY:(Signature) DATE/TIME 10/15/19 15:45 RECEIVED BY: (Signature) LAO

RELINQUISHED BY:(Signature) LAO DATE/TIME 10/16/19 0800 RECEIVED BY: (Signature) Jaclyn Vera

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

LABORATORY: DHL 4

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 2-4C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

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№ 0799

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 10-14-2019 PAGE 1 OF 1

PO#: LAB WORK ORDER#: 19101447

PROJECT LOCATION OR NAME: Elfre Abo/Clark Bldg

LAI PROJECT #: 6-0141-12 COLLECTOR: ML

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: Mtn/NM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESSERVED	ANALYSES
C-11, 0.5'	17	10/14/19	09:10	S	3				X		BTEX ☐ MTBE ☐ / TRPH 418.1 ☐ / TPH 1005 ☐ TPH 1006 ☐ / GASOLINE MOD 8015 ☐ / DIESEL - MOD 8015 ☐ / OIL - MOD 8015 ☐ / VOC 8260 ☐ / SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐ / 8081 PESTICIDES ☐ 8151 HERBICIDES ☐ / 8082 PCBS ☐ / TBLP - METALS (RCRA) ☐ TCLP VOC ☐ / TCLP - PEST ☐ HERB ☐ Semi-VOC ☐ / TOTAL METALS (RCRA) ☐ OTHER LIST ☐ / LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐ / RCI ☐ TOX ☐ FLASHPOINT ☐ / TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐ / pH ☐ HEXAVALENT CHROMIUM ☐ / EXPLOSIVES ☐ PECHLORATE ☐ / CHLORIDE ☐ ANIONS ☐ ALKALINITY ☐
C-11, 1.0'	18		09:12								
C-12, 0.5'	19		09:12								
C-12, 1.0'	20		09:13								
C-13, 0.5'	21		09:27								
C-13, 1.0'	22		09:30								
C-14, 0.5'	23		09:35								
C-14, 1.0'	24		09:38								
C-15, 0.5'	25		09:45								
C-16, 0.5'	26		10:25								
C-17, 0.5'	27	↓	10:25	↓	↓				↓		
Trip Blank 2	28										

FIELD NOTES: Hold Pg Mark L. (Excel only)

TOTAL

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
	10/15/19 15:45	LSO
LSO	10/16/19 0820	Jade Nunez
	DATE/TIME	RECEIVED BY: (Signature)

LABORATORY: DHL

5

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 2.9°C THERM#: 18
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL # Lone Star
☐ HAND DELIVERED

Received by OCD: 4/3/2023 2:46:30 PM

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129892 AI

2A

2B

LSO

WWW.LSO.COM
Questions? Call 800-800-8984

Airbill No. LSO0BYGB

LSO0BYGB

1. To: Print Name (Person) | Phone (Important)

Company Name

Street Address (No P.O. Box or P.O. Box Zip Code Deliveries)

Suite / Floor

City | State | Zip

2. From: Print Name (Person) | Phone (Important) 432-687-0901

Company Name
LARSON & ASSOCIATES

Street Address
507 NORTH MARIENFIELD

Suite / Floor
205

City | State | Zip
MIDLAND | TX | 79701

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- [X] LSO Priority Overnight* By 10:30 a.m. to most cities
- [ ] LSO Early Overnight* By 8:30 a.m. select cities
- [ ] LSO Economy Next Day* By 3 p.m. to most cities
- [ ] LSO 2nd Day*
- [ ] LSO Ground
- [ ] LSO Saturday*
- [ ] Other

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

- [ ] Deliver Without Delivery Signature (See Limits of Liability below)

Release Signature

L 24 x W 11 x H 10

4. Package: Weight: 30 lb

Your Company's Billing Reference Information

Ship Date: (mm/dd/yy) 1/15/23

5. Payment:

FOR DRIVER USE ONLY

Driver Number

- [ ] Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location

Date:

Time: 602

City Code:

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY. See LSO Service Guide for further details.

DHL ANALYTICAL

CUSTODY SEAL

DATE 1/15/2023

SIGNATURE

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CUSTODY SEAL

DATE 10/15/2019

SIGNATURE

DHL ANALYTICAL

1298898 AE

LSO

WWW.LSO.COM
Questions? Call 800-800-8984

Airbill No. LSO0BYGC

LSO0BYGC

1. To: Print Name (Person) | Phone (Important)

Company Name

Street Address (No P.O. Box or P.O. Box Zip Code*Deliveries)

Suite / Floor

City | State | Zip

2. From: Print Name (Person) | Phone (Important) 432-687-0901

Company Name: LARSON & ASSOCIATES

Street Address: 507 NORTH MARIENFELD

Suite / Floor: 205

City: MIDLAND | State: TX | Zip: 79701

3. Service: Visit www.lso.com for availability of services to your destination and enjoy added features by creating your shipping label online.

- [X] LSO Priority Overnight* By 10:30 a.m. to most
- [ ] LSO Early* By 8:3
- [ ] LSO By
- [ ] LS
- [ ] LSO Ground
- [ ] LSO Saturday*
- [ ] Other

*Check commitment times and availability at www.lso.com

Assumed LSO Priority Overnight service unless otherwise noted.

- [ ] Deliv Without Delivery Signature (See Limits of Liability below)

Release Signature

L x W x H

4. Package: Weight:

Your Company's Billing Reference Information

Ship Date: (mm/dd/yy)

5. Payment:

FOR DRIVER USE ONLY

Driver Number

[ ] Check here if LSO Supplies are used with LSO Ground Service.

Pick-up Location

Date:

Time:

City Code:

ILLEGIBLE HANDWRITING ON AIRBILL MAY DELAY TRANSIT TIMES OR RESULT IN NON-DELIVERY. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. "Signature Required" service is only available when printing a label online at LSO.com. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR LSO EARLY OVERNIGHT SERVICE. Packaging provided by LSO is for EXPRESS USE ONLY – NEVER TO BE USED FOR LSO GROUND Service. OVERSIZE RATES MAY APPLY. DELIVERY COMMITMENTS MAY VARY. ADDITIONAL FEES MAY APPLY. See LSO Service Guide for further details.

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DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates Date Received: 10/16/2019

Work Order Number 1910147 Received by: JW

Checklist completed by: _____ 10/16/2019 Reviewed by _____ 10/16/2019
Signature Date Initials Date

Carrier name: LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	2.4 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

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

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

DHL Analytical, Inc. **Date:** *29-Oct-19*

CLIENT: Larson & Associates
Project: Empire ABO/Clark Bldg
Lab Order: 1910147

CASE NARRATIVE

Sample was analyzed using the methods outlined in the following references:

Method SW8082A - PCB Analysis
Method M8015D - DRO Analysis
Method M8015V - GRO Analysis
Method SW6020A - Metals Analysis
Method SW7471B - Mercury Analysis
Method SW8260C - Volatile Organics Analysis
Method D2216 - Percent Moisture Analysis

LOG IN

The samples were received and log-in performed on 10/16/2019. A total of 28 samples were received and 27 were analyzed. One sample placed on-hold per the client's request. The samples arrived in good condition and were properly packaged. The samples were collected in Mountain Standard time-zone.

DRO ANALYSIS

For DRO Analysis, the recovery of surrogate Octacosane for twenty-three samples, the Matrix Spike and Matrix Spike Duplicate (1910147-17 MS/MSD) was above the method control limits. These are flagged accordingly in the Analytical Data Report and the QC Summary Report. The remaining surrogate for these sample was within method control limits. No further corrective action was taken.

For DRO Analysis, the recoveries and RPD of the Matrix Spike and Matrix Spike Duplicate (1910147-17 MS/MSD) were outside of the method control limits. These are flagged accordingly in the QC Summary Report. The associated LCS was within method control limits. No further corrective action was taken.

GRO ANALYSIS

For GRO Analysis, the recovery of the Initial Calibration Verification (ICV-191022) was below the method control limits. This is flagged accordingly in the QC Summary Report. The associated LCS was within method control limits. No further corrective action was taken.

PCB ANALYSIS

For PCB Analysis, the recovery of surrogate Decachlorobiphenyl for two samples was below the method control limits. These are flagged accordingly in the Analytical Data Report. The remaining

CLIENT:	Larson & Associates
Project:	Empire ABO/Clark Bldg
Lab Order:	1910147

CASE NARRATIVE

surrogate for these sample was within method control limits. No further corrective action was taken.

For PCB Analysis, both Aroclors 1016 and 1254 were detected in Sample C-16, 0.5'. Due to the nature of these aroclor patterns overlap, the total PCB concentration for this sample, may be biased high. No further corrective action was taken.

METALS ANALYSIS

For Metals Analysis, the recovery of Barium for the Matrix Spike and Matrix Spike Duplicate (1910147-07 MS/MSD) was above the method control limits. This is flagged accordingly in the QC Summary Report. This analyte was within method control limits in the associated LCS. No further corrective action was taken.

For Metals Analysis, for Batches 93342 and 93341, the RPD of Selenium for each of the Serial Dilution(s) (1910202-02, 1910147-07 SD) was above the method control limit. These are flagged accordingly in the QC Summary Report. This analyte was within method control limits in the associated LCS(s). No further corrective action was taken.

VOLATILES ANALYSIS

For Volatiles Analysis, the recovery of Ethylbenzene for the Matrix Spike and Matrix Spike Duplicate (1910167-17 MS/MSD) was outside of the method control limits. This is flagged accordingly in the QC Summary Report. This compound was within method control limits in the associated LCS. No further corrective action was taken.

For Volatiles Analysis, the recovery of Ethylbenzene for the Initial Calibration Verification (ICV-191021) was marginally below the method control limits specified in SW8260C (80-120% recovery). This is flagged accordingly in the QC Summary report. The number of target analytes outside of the method control limits for the ICV is greater than 20% of the total number of compounds being reported. This compound was within method control limits in the associated LCS. No further corrective action was taken.

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT: Larson & Associates
Project: Empire ABO/Clark Bldg
Lab Order: 1910147

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1910147-01	C-1, 0.5'		10/14/19 07:45 AM	10/16/2019
1910147-02	C-2, 0.5'		10/14/19 07:35 AM	10/16/2019
1910147-03	C-2, 1.0'		10/14/19 07:38 AM	10/16/2019
1910147-04	C-3, 0.5'		10/14/19 07:50 AM	10/16/2019
1910147-05	C-3, 1.0'		10/14/19 07:55 AM	10/16/2019
1910147-06	C-4, 0.5'		10/14/19 07:55 AM	10/16/2019
1910147-07	C-5, 0.5'		10/14/19 08:10 AM	10/16/2019
1910147-08	C-6, 0.5'		10/14/19 08:05 AM	10/16/2019
1910147-09	C-6, 1.0'		10/14/19 08:09 AM	10/16/2019
1910147-10	C-7, 0.5'		10/14/19 08:22 AM	10/16/2019
1910147-11	C-7, 1.0'		10/14/19 08:25 AM	10/16/2019
1910147-12	C-8, 0.5'		10/14/19 08:20 AM	10/16/2019
1910147-13	C-9, 0.5'		10/14/19 08:50 AM	10/16/2019
1910147-14	C-9, 1.0'		10/14/19 08:52 AM	10/16/2019
1910147-15	C-10, 0.5'		10/14/19 08:55 AM	10/16/2019
1910147-16	Trip Blank 1		10/14/19	10/16/2019
1910147-17	C-11, 0.5'		10/14/19 09:10 AM	10/16/2019
1910147-18	C-11, 1.0'		10/14/19 09:12 AM	10/16/2019
1910147-19	C-12, 0.5'		10/14/19 09:12 AM	10/16/2019
1910147-20	C-12, 1.0'		10/14/19 09:13 AM	10/16/2019
1910147-21	C-13, 0.5'		10/14/19 09:27 AM	10/16/2019
1910147-22	C-13, 1.0'		10/14/19 09:30 AM	10/16/2019
1910147-23	C-14, 0.5'		10/14/19 09:35 AM	10/16/2019
1910147-24	C-14, 1.0'		10/14/19 09:38 AM	10/16/2019
1910147-25	C-15, 0.5'		10/14/19 09:45 AM	10/16/2019
1910147-26	C-16, 0.5'		10/14/19 10:25 AM	10/16/2019
1910147-27	C-17, 0.5'		10/14/19 10:25 AM	10/16/2019
1910147-28	Trip Blank 2		10/14/19	10/16/2019

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Lab Order: 1910147
Client: Larson & Associates
Project: Empire ABO/Clark Bldg

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1910147-01A	C-1, 0.5'	10/14/19 07:45 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-01B	C-1, 0.5'	10/14/19 07:45 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-01C	C-1, 0.5'	10/14/19 07:45 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-1, 0.5'	10/14/19 07:45 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-1, 0.5'	10/14/19 07:45 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-1, 0.5'	10/14/19 07:45 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-1, 0.5'	10/14/19 07:45 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-02A	C-2, 0.5'	10/14/19 07:35 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-02B	C-2, 0.5'	10/14/19 07:35 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-02C	C-2, 0.5'	10/14/19 07:35 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-2, 0.5'	10/14/19 07:35 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-2, 0.5'	10/14/19 07:35 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-2, 0.5'	10/14/19 07:35 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-2, 0.5'	10/14/19 07:35 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-03A	C-2, 1.0'	10/14/19 07:38 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
	C-2, 1.0'	10/14/19 07:38 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-03B	C-2, 1.0'	10/14/19 07:38 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-03C	C-2, 1.0'	10/14/19 07:38 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-2, 1.0'	10/14/19 07:38 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-2, 1.0'	10/14/19 07:38 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-2, 1.0'	10/14/19 07:38 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-2, 1.0'	10/14/19 07:38 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-04A	C-3, 0.5'	10/14/19 07:50 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-04B	C-3, 0.5'	10/14/19 07:50 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-04C	C-3, 0.5'	10/14/19 07:50 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-3, 0.5'	10/14/19 07:50 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-3, 0.5'	10/14/19 07:50 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-3, 0.5'	10/14/19 07:50 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252

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Lab Order: 1910147
Client: Larson & Associates
Project: Empire ABO/Clark Bldg

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1910147-04C	C-3, 0.5'	10/14/19 07:50 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-05A	C-3, 1.0'	10/14/19 07:55 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-05B	C-3, 1.0'	10/14/19 07:55 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-05C	C-3, 1.0'	10/14/19 07:55 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-3, 1.0'	10/14/19 07:55 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-3, 1.0'	10/14/19 07:55 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-3, 1.0'	10/14/19 07:55 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-3, 1.0'	10/14/19 07:55 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-06A	C-4, 0.5'	10/14/19 07:55 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-06B	C-4, 0.5'	10/14/19 07:55 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-06C	C-4, 0.5'	10/14/19 07:55 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-4, 0.5'	10/14/19 07:55 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-4, 0.5'	10/14/19 07:55 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-4, 0.5'	10/14/19 07:55 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-4, 0.5'	10/14/19 07:55 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-07A	C-5, 0.5'	10/14/19 08:10 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-07B	C-5, 0.5'	10/14/19 08:10 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-07C	C-5, 0.5'	10/14/19 08:10 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-5, 0.5'	10/14/19 08:10 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-5, 0.5'	10/14/19 08:10 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-5, 0.5'	10/14/19 08:10 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-5, 0.5'	10/14/19 08:10 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-08A	C-6, 0.5'	10/14/19 08:05 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-08B	C-6, 0.5'	10/14/19 08:05 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-08C	C-6, 0.5'	10/14/19 08:05 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-6, 0.5'	10/14/19 08:05 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-6, 0.5'	10/14/19 08:05 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-6, 0.5'	10/14/19 08:05 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252

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Lab Order: 1910147
Client: Larson & Associates
Project: Empire ABO/Clark Bldg

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1910147-08C	C-6, 0.5'	10/14/19 08:05 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-09A	C-6, 1.0'	10/14/19 08:09 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-09B	C-6, 1.0'	10/14/19 08:09 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-09C	C-6, 1.0'	10/14/19 08:09 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-6, 1.0'	10/14/19 08:09 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-6, 1.0'	10/14/19 08:09 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-6, 1.0'	10/14/19 08:09 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-6, 1.0'	10/14/19 08:09 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-10A	C-7, 0.5'	10/14/19 08:22 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-10B	C-7, 0.5'	10/14/19 08:22 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-10C	C-7, 0.5'	10/14/19 08:22 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-7, 0.5'	10/14/19 08:22 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-7, 0.5'	10/14/19 08:22 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-7, 0.5'	10/14/19 08:22 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-7, 0.5'	10/14/19 08:22 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-11A	C-7, 1.0'	10/14/19 08:25 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-11B	C-7, 1.0'	10/14/19 08:25 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-11C	C-7, 1.0'	10/14/19 08:25 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-7, 1.0'	10/14/19 08:25 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-7, 1.0'	10/14/19 08:25 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-7, 1.0'	10/14/19 08:25 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-7, 1.0'	10/14/19 08:25 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
	C-7, 1.0'	10/14/19 08:25 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-12A	C-8, 0.5'	10/14/19 08:20 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-12B	C-8, 0.5'	10/14/19 08:20 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-12C	C-8, 0.5'	10/14/19 08:20 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-8, 0.5'	10/14/19 08:20 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-8, 0.5'	10/14/19 08:20 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386

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Project: Empire ABO/Clark Bldg

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1910147-12C	C-8, 0.5'	10/14/19 08:20 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-8, 0.5'	10/14/19 08:20 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-13A	C-9, 0.5'	10/14/19 08:50 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-13B	C-9, 0.5'	10/14/19 08:50 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-13C	C-9, 0.5'	10/14/19 08:50 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-9, 0.5'	10/14/19 08:50 AM	Soil	D2216	Moisture Preparation	10/22/19 04:24 PM	93358
	C-9, 0.5'	10/14/19 08:50 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-9, 0.5'	10/14/19 08:50 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-9, 0.5'	10/14/19 08:50 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-9, 0.5'	10/14/19 08:50 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-14A	C-9, 1.0'	10/14/19 08:52 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-14B	C-9, 1.0'	10/14/19 08:52 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-14C	C-9, 1.0'	10/14/19 08:52 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-9, 1.0'	10/14/19 08:52 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-9, 1.0'	10/14/19 08:52 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-9, 1.0'	10/14/19 08:52 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-9, 1.0'	10/14/19 08:52 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-15A	C-10, 0.5'	10/14/19 08:55 AM	Soil	SW5035A	Purge and Trap 5035	10/17/19 09:52 AM	93271
1910147-15B	C-10, 0.5'	10/14/19 08:55 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/17/19 09:06 AM	93268
1910147-15C	C-10, 0.5'	10/14/19 08:55 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-10, 0.5'	10/14/19 08:55 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-10, 0.5'	10/14/19 08:55 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-10, 0.5'	10/14/19 08:55 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 08:50 AM	93386
	C-10, 0.5'	10/14/19 08:55 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-10, 0.5'	10/14/19 08:55 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-17A	C-11, 0.5'	10/14/19 09:10 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-17B	C-11, 0.5'	10/14/19 09:10 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-17C	C-11, 0.5'	10/14/19 09:10 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398

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PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1910147-17C	C-11, 0.5'	10/14/19 09:10 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-11, 0.5'	10/14/19 09:10 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-11, 0.5'	10/14/19 09:10 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-11, 0.5'	10/14/19 09:10 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-18A	C-11, 1.0'	10/14/19 09:12 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-18B	C-11, 1.0'	10/14/19 09:12 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-18C	C-11, 1.0'	10/14/19 09:12 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-11, 1.0'	10/14/19 09:12 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-11, 1.0'	10/14/19 09:12 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-11, 1.0'	10/14/19 09:12 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-11, 1.0'	10/14/19 09:12 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-11, 1.0'	10/14/19 09:12 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-19A	C-12, 0.5'	10/14/19 09:12 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-19B	C-12, 0.5'	10/14/19 09:12 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-19C	C-12, 0.5'	10/14/19 09:12 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-12, 0.5'	10/14/19 09:12 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-12, 0.5'	10/14/19 09:12 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-12, 0.5'	10/14/19 09:12 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-12, 0.5'	10/14/19 09:12 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252
	C-12, 0.5'	10/14/19 09:12 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-20A	C-12, 1.0'	10/14/19 09:13 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-20B	C-12, 1.0'	10/14/19 09:13 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
	C-12, 1.0'	10/14/19 09:13 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-20C	C-12, 1.0'	10/14/19 09:13 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-12, 1.0'	10/14/19 09:13 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-12, 1.0'	10/14/19 09:13 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-12, 1.0'	10/14/19 09:13 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-12, 1.0'	10/14/19 09:13 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/16/19 01:06 PM	93252

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PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1910147-20C	C-12, 1.0'	10/14/19 09:13 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-21A	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-21B	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-21C	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:11 AM	93398
	C-13, 0.5'	10/14/19 09:27 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295
	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295
	C-13, 0.5'	10/14/19 09:27 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:41 AM	93341
1910147-22A	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-22B	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-22C	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:13 AM	93400
	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:13 AM	93400
	C-13, 1.0'	10/14/19 09:30 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295
	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295
	C-13, 1.0'	10/14/19 09:30 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:43 AM	93342
1910147-23A	C-14, 0.5'	10/14/19 09:35 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-23B	C-14, 0.5'	10/14/19 09:35 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-23C	C-14, 0.5'	10/14/19 09:35 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:13 AM	93400
	C-14, 0.5'	10/14/19 09:35 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-14, 0.5'	10/14/19 09:35 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-14, 0.5'	10/14/19 09:35 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-14, 0.5'	10/14/19 09:35 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295

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PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1910147-23C	C-14, 0.5'	10/14/19 09:35 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:43 AM	93342
1910147-24A	C-14, 1.0'	10/14/19 09:38 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-24B	C-14, 1.0'	10/14/19 09:38 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
	C-14, 1.0'	10/14/19 09:38 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-24C	C-14, 1.0'	10/14/19 09:38 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:13 AM	93400
	C-14, 1.0'	10/14/19 09:38 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-14, 1.0'	10/14/19 09:38 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-14, 1.0'	10/14/19 09:38 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295
	C-14, 1.0'	10/14/19 09:38 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:43 AM	93342
1910147-25A	C-15, 0.5'	10/14/19 09:45 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-25B	C-15, 0.5'	10/14/19 09:45 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-25C	C-15, 0.5'	10/14/19 09:45 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:13 AM	93400
	C-15, 0.5'	10/14/19 09:45 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-15, 0.5'	10/14/19 09:45 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-15, 0.5'	10/14/19 09:45 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-15, 0.5'	10/14/19 09:45 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295
	C-15, 0.5'	10/14/19 09:45 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:43 AM	93342
1910147-26A	C-16, 0.5'	10/14/19 10:25 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-26B	C-16, 0.5'	10/14/19 10:25 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
	C-16, 0.5'	10/14/19 10:25 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318
1910147-26C	C-16, 0.5'	10/14/19 10:25 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:13 AM	93400
	C-16, 0.5'	10/14/19 10:25 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-16, 0.5'	10/14/19 10:25 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-16, 0.5'	10/14/19 10:25 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-16, 0.5'	10/14/19 10:25 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295
	C-16, 0.5'	10/14/19 10:25 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:43 AM	93342
1910147-27A	C-17, 0.5'	10/14/19 10:25 AM	Soil	SW5035A	Purge and Trap 5035	10/18/19 10:42 AM	93302
1910147-27B	C-17, 0.5'	10/14/19 10:25 AM	Soil	SW5035A	Purge and Trap Soils GC- Gas	10/21/19 09:49 AM	93318

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DHL Analytical, Inc.

29-Oct-19

Lab Order: 1910147
Client: Larson & Associates
Project: Empire ABO/Clark Bldg

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1910147-27C	C-17, 0.5'	10/14/19 10:25 AM	Soil	SW7471B	Mercury Soil Prep, Total	10/24/19 10:13 AM	93400
	C-17, 0.5'	10/14/19 10:25 AM	Soil	D2216	Moisture Preparation	10/23/19 03:00 PM	93380
	C-17, 0.5'	10/14/19 10:25 AM	Soil	SW3550C	Soil Prep Sonication: DRO	10/24/19 11:27 AM	93401
	C-17, 0.5'	10/14/19 10:25 AM	Soil	SW3550C	Soil Prep Sonication: PCB	10/18/19 09:22 AM	93295
	C-17, 0.5'	10/14/19 10:25 AM	Soil	SW3050B	Soil Prep Total Metals: ICP-MS	10/22/19 08:43 AM	93342

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1910147-01A	C-1, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 12:55 PM	GCMS1_191017A
1910147-01B	C-1, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 12:56 PM	GC4_191017A
1910147-01C	C-1, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 11:34 AM	GC16_191017A
	C-1, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-1, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:16 AM	CETAC2_HG_191025A
	C-1, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	1	10/25/19 12:38 PM	GC15_191025A
	C-1, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:26 AM	ICP-MS4_191023A
1910147-02A	C-2, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 01:26 PM	GCMS1_191017A
1910147-02B	C-2, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 01:19 PM	GC4_191017A
1910147-02C	C-2, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 11:59 AM	GC16_191017A
	C-2, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-2, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:18 AM	CETAC2_HG_191025A
	C-2, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	10	10/25/19 01:43 PM	GC15_191025A
	C-2, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:28 AM	ICP-MS4_191023A
1910147-03A	C-2, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 01:57 PM	GCMS1_191017A
	C-2, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/21/19 12:09 PM	GCMS1_191021A
1910147-03B	C-2, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 01:44 PM	GC4_191017A
1910147-03C	C-2, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 12:25 PM	GC16_191017A
	C-2, 1.0'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-2, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:21 AM	CETAC2_HG_191025A
	C-2, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 02:45 PM	GC15_191025A
	C-2, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:30 AM	ICP-MS4_191023A
1910147-04A	C-3, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 02:28 PM	GCMS1_191017A
1910147-04B	C-3, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 02:08 PM	GC4_191017A
1910147-04C	C-3, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 12:50 PM	GC16_191017A
	C-3, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1910147-04C	C-3, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:23 AM	CETAC2_HG_191025A
	C-3, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 02:54 PM	GC15_191025A
	C-3, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:32 AM	ICP-MS4_191023A
1910147-05A	C-3, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 03:00 PM	GCMS1_191017A
1910147-05B	C-3, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 02:32 PM	GC4_191017A
1910147-05C	C-3, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 01:15 PM	GC16_191017A
	C-3, 1.0'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-3, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:25 AM	CETAC2_HG_191025A
	C-3, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 03:03 PM	GC15_191025A
	C-3, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:34 AM	ICP-MS4_191023A
1910147-06A	C-4, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 04:28 PM	GCMS1_191017A
1910147-06B	C-4, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 04:32 PM	GC4_191017A
1910147-06C	C-4, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 01:41 PM	GC16_191017A
	C-4, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-4, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:27 AM	CETAC2_HG_191025A
	C-4, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 03:12 PM	GC15_191025A
	C-4, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:36 AM	ICP-MS4_191023A
1910147-07A	C-5, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 05:00 PM	GCMS1_191017A
1910147-07B	C-5, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 04:57 PM	GC4_191017A
1910147-07C	C-5, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 02:06 PM	GC16_191017A
	C-5, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-5, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:30 AM	CETAC2_HG_191025A
	C-5, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 03:21 PM	GC15_191025A
	C-5, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:22 AM	ICP-MS4_191023A
1910147-08A	C-6, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 04:34 PM	GCMS1_191017A
1910147-08B	C-6, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 05:21 PM	GC4_191017A

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Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1910147-08C	C-6, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 02:31 PM	GC16_191017A
	C-6, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-6, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:32 AM	CETAC2_HG_191025A
	C-6, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 04:35 PM	GC15_191025A
	C-6, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:38 AM	ICP-MS4_191023A
1910147-09A	C-6, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 05:05 PM	GCMS1_191017A
1910147-09B	C-6, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 05:45 PM	GC4_191017A
1910147-09C	C-6, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 02:57 PM	GC16_191017A
	C-6, 1.0'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-6, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:34 AM	CETAC2_HG_191025A
	C-6, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93386	1	10/25/19 02:27 PM	GC15_191025A
	C-6, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:40 AM	ICP-MS4_191023A
1910147-10A	C-7, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 05:36 PM	GCMS1_191017A
1910147-10B	C-7, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 06:09 PM	GC4_191017A
1910147-10C	C-7, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 04:38 PM	GC16_191017A
	C-7, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-7, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:37 AM	CETAC2_HG_191025A
	C-7, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 03:39 PM	GC15_191025A
	C-7, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 11:42 AM	ICP-MS4_191023A
1910147-11A	C-7, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 06:07 PM	GCMS1_191017A
1910147-11B	C-7, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 06:33 PM	GC4_191017A
1910147-11C	C-7, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 05:03 PM	GC16_191017A
	C-7, 1.0'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-7, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:44 AM	CETAC2_HG_191025A
	C-7, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93386	1	10/25/19 02:36 PM	GC15_191025A
	C-7, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:09 PM	ICP-MS4_191023A

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ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1910147-11C	C-7, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	50	10/23/19 01:56 PM	ICP-MS4_191023A
1910147-12A	C-8, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 06:38 PM	GCMS1_191017A
1910147-12B	C-8, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 06:57 PM	GC4_191017A
1910147-12C	C-8, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 05:29 PM	GC16_191017A
	C-8, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-8, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:47 AM	CETAC2_HG_191025A
	C-8, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 03:48 PM	GC15_191025A
	C-8, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:11 PM	ICP-MS4_191023A
1910147-13A	C-9, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 07:10 PM	GCMS1_191017A
1910147-13B	C-9, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 07:21 PM	GC4_191017A
1910147-13C	C-9, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	5	10/21/19 02:42 PM	GC16_191021A
	C-9, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 05:54 PM	GC16_191017A
	C-9, 0.5'	Soil	D2216	Percent Moisture	93358	1	10/23/19 08:45 AM	PMOIST_191022A
	C-9, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:49 AM	CETAC2_HG_191025A
	C-9, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 03:57 PM	GC15_191025A
	C-9, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:13 PM	ICP-MS4_191023A
1910147-14A	C-9, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 07:41 PM	GCMS1_191017A
1910147-14B	C-9, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 08:10 PM	GC4_191017A
1910147-14C	C-9, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 06:19 PM	GC16_191017A
	C-9, 1.0'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-9, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:51 AM	CETAC2_HG_191025A
	C-9, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 04:06 PM	GC15_191025A
	C-9, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:15 PM	ICP-MS4_191023A
1910147-15A	C-10, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93271	50	10/17/19 08:12 PM	GCMS1_191017A
1910147-15B	C-10, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93268	20	10/17/19 08:34 PM	GC4_191017A
1910147-15C	C-10, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 06:45 PM	GC16_191017A

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Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1910147-15C	C-10, 0.5'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-10, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:53 AM	CETAC2_HG_191025A
	C-10, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	5	10/25/19 12:54 PM	CETAC2_HG_191025A
	C-10, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93386	20	10/25/19 04:15 PM	GC15_191025A
	C-10, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:17 PM	ICP-MS4_191023A
1910147-17A	C-11, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 03:53 PM	GCMS1_191018A
1910147-17B	C-11, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 01:28 PM	GC4_191021A
1910147-17C	C-11, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 07:10 PM	GC16_191017A
	C-11, 0.5'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-11, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:56 AM	CETAC2_HG_191025A
	C-11, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 11:01 AM	GC15_191028A
	C-11, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:19 PM	ICP-MS4_191023A
1910147-18A	C-11, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 04:24 PM	GCMS1_191018A
1910147-18B	C-11, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 01:53 PM	GC4_191021A
1910147-18C	C-11, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 07:35 PM	GC16_191017A
	C-11, 1.0'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-11, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 11:58 AM	CETAC2_HG_191025A
	C-11, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 11:19 AM	GC15_191028A
	C-11, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93401	50	10/28/19 03:27 PM	GC15_191028A
	C-11, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:21 PM	ICP-MS4_191023A
1910147-19A	C-12, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 04:55 PM	GCMS1_191018A
1910147-19B	C-12, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 02:18 PM	GC4_191021A
1910147-19C	C-12, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 08:01 PM	GC16_191017A
	C-12, 0.5'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-12, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 12:00 PM	CETAC2_HG_191025A
	C-12, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 11:37 AM	GC15_191028A

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Lab Order: 1910147
Client: Larson & Associates
Project: Empire ABO/Clark Bldg

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1910147-19C	C-12, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	100	10/28/19 03:45 PM	GC15_191028A
	C-12, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:23 PM	ICP-MS4_191023A
1910147-20A	C-12, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 05:27 PM	GCMS1_191018A
1910147-20B	C-12, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 02:42 PM	GC4_191021A
	C-12, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 06:21 PM	GC4_191021A
1910147-20C	C-12, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93252	1	10/17/19 08:26 PM	GC16_191017A
	C-12, 1.0'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-12, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 12:03 PM	CETAC2_HG_191025A
	C-12, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93401	100	10/28/19 04:03 PM	GC15_191028A
	C-12, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 11:55 AM	GC15_191028A
	C-12, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:25 PM	ICP-MS4_191023A
1910147-21A	C-13, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 05:58 PM	GCMS1_191018A
1910147-21B	C-13, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 03:06 PM	GC4_191021A
1910147-21C	C-13, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/21/19 11:44 AM	GC16_191021A
	C-13, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/24/19 04:09 PM	GC16_191024A
	C-13, 0.5'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-13, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	1	10/25/19 12:05 PM	CETAC2_HG_191025A
	C-13, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93398	10	10/25/19 12:56 PM	CETAC2_HG_191025A
	C-13, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	200	10/28/19 04:21 PM	GC15_191028A
	C-13, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	20	10/28/19 12:13 PM	GC15_191028A
	C-13, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93341	5	10/23/19 12:27 PM	ICP-MS4_191023A
1910147-22A	C-13, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 06:29 PM	GCMS1_191018A
1910147-22B	C-13, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 03:31 PM	GC4_191021A
1910147-22C	C-13, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/21/19 12:09 PM	GC16_191021A
	C-13, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/24/19 03:37 PM	GC16_191024A
	C-13, 1.0'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A

Released to Imaging: 4/3/2023 3:36:09 PM
Received by OCD: 4/3/2023 2:46:30 PM

Lab Order: 1910147
Client: Larson & Associates
Project: Empire ABO/Clark Bldg

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1910147-22C	C-13, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93400	1	10/25/19 12:28 PM	CETAC2_HG_191025A
	C-13, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93400	10	10/25/19 12:58 PM	CETAC2_HG_191025A
	C-13, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93401	20	10/28/19 12:31 PM	GC15_191028A
	C-13, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93401	100	10/28/19 04:39 PM	GC15_191028A
	C-13, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93342	5	10/23/19 01:00 PM	ICP-MS4_191023A
1910147-23A	C-14, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 07:00 PM	GCMS1_191018A
1910147-23B	C-14, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 03:55 PM	GC4_191021A
1910147-23C	C-14, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/21/19 12:35 PM	GC16_191021A
	C-14, 0.5'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-14, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93400	1	10/25/19 12:32 PM	CETAC2_HG_191025A
	C-14, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 12:49 PM	GC15_191028A
	C-14, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	20	10/28/19 04:57 PM	GC15_191028A
	C-14, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93342	5	10/23/19 01:02 PM	ICP-MS4_191023A
1910147-24A	C-14, 1.0'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 07:32 PM	GCMS1_191018A
1910147-24B	C-14, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 04:19 PM	GC4_191021A
	C-14, 1.0'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 07:58 PM	GC4_191021A
1910147-24C	C-14, 1.0'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/21/19 01:00 PM	GC16_191021A
	C-14, 1.0'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-14, 1.0'	Soil	SW7471B	Total Mercury: Soil/Solid	93400	1	10/25/19 12:34 PM	CETAC2_HG_191025A
	C-14, 1.0'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 01:07 PM	GC15_191028A
	C-14, 1.0'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93342	5	10/23/19 01:04 PM	ICP-MS4_191023A
1910147-25A	C-15, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 08:03 PM	GCMS1_191018A
1910147-25B	C-15, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 04:43 PM	GC4_191021A
1910147-25C	C-15, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/21/19 01:25 PM	GC16_191021A
	C-15, 0.5'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-15, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93400	1	10/25/19 12:36 PM	CETAC2_HG_191025A

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Received by OCD: 4/3/2023 2:46:30 PM

Lab Order: 1910147
Client: Larson & Associates
Project: Empire ABO/Clark Bldg

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1910147-25C	C-15, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 01:26 PM	GC15_191028A
	C-15, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	20	10/28/19 05:24 PM	GC15_191028A
	C-15, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93342	5	10/23/19 01:06 PM	ICP-MS4_191023A
1910147-26A	C-16, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 08:34 PM	GCMS1_191018A
1910147-26B	C-16, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 08:23 PM	GC4_191021A
	C-16, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 05:07 PM	GC4_191021A
1910147-26C	C-16, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/21/19 01:51 PM	GC16_191021A
	C-16, 0.5'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-16, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93400	1	10/25/19 12:39 PM	CETAC2_HG_191025A
	C-16, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 01:44 PM	GC15_191028A
	C-16, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	20	10/28/19 05:43 PM	GC15_191028A
	C-16, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93342	5	10/23/19 01:08 PM	ICP-MS4_191023A
1910147-27A	C-17, 0.5'	Soil	SW8260C	Volatiles by 8260/5035 GC/MS	93302	50	10/18/19 09:05 PM	GCMS1_191018A
1910147-27B	C-17, 0.5'	Soil	M8015V	TPH Purgeable by GC - Soil	93318	20	10/21/19 05:56 PM	GC4_191021A
1910147-27C	C-17, 0.5'	Soil	SW8082A	PCB by GC - Soil/Solid	93295	1	10/21/19 02:16 PM	GC16_191021A
	C-17, 0.5'	Soil	D2216	Percent Moisture	93380	1	10/24/19 08:37 AM	PMOIST_191023A
	C-17, 0.5'	Soil	SW7471B	Total Mercury: Soil/Solid	93400	1	10/25/19 12:41 PM	CETAC2_HG_191025A
	C-17, 0.5'	Soil	M8015D	TPH Extractable by GC - Soil	93401	10	10/28/19 02:02 PM	GC15_191028A
	C-17, 0.5'	Soil	SW6020A	Trace Metals: ICP-MS - Solid	93342	5	10/23/19 01:10 PM	ICP-MS4_191023A

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-1, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-01
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:45 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0517	0.0517	0.103		mg/Kg-dry	1	10/17/19 11:34 AM
Aroclor 1221	<0.0517	0.0517	0.103		mg/Kg-dry	1	10/17/19 11:34 AM
Aroclor 1232	<0.0517	0.0517	0.103		mg/Kg-dry	1	10/17/19 11:34 AM
Aroclor 1242	<0.0517	0.0517	0.103		mg/Kg-dry	1	10/17/19 11:34 AM
Aroclor 1248	<0.0517	0.0517	0.103		mg/Kg-dry	1	10/17/19 11:34 AM
Aroclor 1254	0.0661	0.0517	0.103	J	mg/Kg-dry	1	10/17/19 11:34 AM
Aroclor 1260	<0.0517	0.0517	0.103		mg/Kg-dry	1	10/17/19 11:34 AM
Total PCBs	0.0661	0.0517	0.103	J	mg/Kg-dry	1	10/17/19 11:34 AM
Surr: Decachlorobiphenyl	95.1	0	58-125		%REC	1	10/17/19 11:34 AM
Surr: Tetrachloro-m-xylene	96.1	0	40-130		%REC	1	10/17/19 11:34 AM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	12.0	3.12	10.4		mg/Kg-dry	1	10/25/19 12:38 PM
TPH-ORO >C28-C35	11.7	3.12	10.4		mg/Kg-dry	1	10/25/19 12:38 PM
Surr: Isopropylbenzene	68.3	0	47-142		%REC	1	10/25/19 12:38 PM
Surr: Octacosane	92.8	0	25-162		%REC	1	10/25/19 12:38 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.09	2.09	4.19		mg/Kg-dry	20	10/17/19 12:56 PM
Surr: Tetrachlorethene	124	0	70-134		%REC	20	10/17/19 12:56 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	1.97	0.499	0.997		mg/Kg-dry	5	10/23/19 11:26 AM
Barium	205	0.499	1.99		mg/Kg-dry	5	10/23/19 11:26 AM
Cadmium	0.326	0.0997	0.299		mg/Kg-dry	5	10/23/19 11:26 AM
Chromium	10.8	0.499	1.99		mg/Kg-dry	5	10/23/19 11:26 AM
Lead	5.30	0.0997	0.299		mg/Kg-dry	5	10/23/19 11:26 AM
Selenium	1.28	0.150	0.499		mg/Kg-dry	5	10/23/19 11:26 AM
Silver	<0.0997	0.0997	0.199		mg/Kg-dry	5	10/23/19 11:26 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	<0.0159	0.0159	0.0398		mg/Kg-dry	1	10/25/19 11:16 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0524	0.0524	0.262		mg/Kg-dry	50	10/17/19 12:55 PM
Ethylbenzene	<0.0524	0.0524	0.262		mg/Kg-dry	50	10/17/19 12:55 PM
Toluene	<0.0524	0.0524	0.262		mg/Kg-dry	50	10/17/19 12:55 PM
Xylenes, Total	<0.0524	0.0524	0.262		mg/Kg-dry	50	10/17/19 12:55 PM
Surr: 1,2-Dichloroethane-d4	113	0	52-149		%REC	50	10/17/19 12:55 PM
Surr: 4-Bromofluorobenzene	99.9	0	84-118		%REC	50	10/17/19 12:55 PM
Surr: Dibromofluoromethane	102	0	65-135		%REC	50	10/17/19 12:55 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-1, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-01
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:45 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	96.4	0	84-116		%REC	50	10/17/19 12:55 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	4.51	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-2, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-02
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:35 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0513	0.0513	0.103		mg/Kg-dry	1	10/17/19 11:59 AM
Aroclor 1221	<0.0513	0.0513	0.103		mg/Kg-dry	1	10/17/19 11:59 AM
Aroclor 1232	<0.0513	0.0513	0.103		mg/Kg-dry	1	10/17/19 11:59 AM
Aroclor 1242	<0.0513	0.0513	0.103		mg/Kg-dry	1	10/17/19 11:59 AM
Aroclor 1248	<0.0513	0.0513	0.103		mg/Kg-dry	1	10/17/19 11:59 AM
Aroclor 1254	0.109	0.0513	0.103		mg/Kg-dry	1	10/17/19 11:59 AM
Aroclor 1260	<0.0513	0.0513	0.103		mg/Kg-dry	1	10/17/19 11:59 AM
Total PCBs	0.109	0.0513	0.103		mg/Kg-dry	1	10/17/19 11:59 AM
Surr: Decachlorobiphenyl	78.3	0	58-125		%REC	1	10/17/19 11:59 AM
Surr: Tetrachloro-m-xylene	98.0	0	40-130		%REC	1	10/17/19 11:59 AM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	929	30.1	100		mg/Kg-dry	10	10/25/19 01:43 PM
TPH-ORO >C28-C35	1310	30.1	100		mg/Kg-dry	10	10/25/19 01:43 PM
Surr: Isopropylbenzene	129	0	47-142		%REC	10	10/25/19 01:43 PM
Surr: Octacosane	767	0	25-162	S	%REC	10	10/25/19 01:43 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.11	2.11	4.23		mg/Kg-dry	20	10/17/19 01:19 PM
Surr: Tetrachlorethene	118	0	70-134		%REC	20	10/17/19 01:19 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	2.25	0.472	0.944		mg/Kg-dry	5	10/23/19 11:28 AM
Barium	238	0.472	1.89		mg/Kg-dry	5	10/23/19 11:28 AM
Cadmium	0.650	0.0944	0.283		mg/Kg-dry	5	10/23/19 11:28 AM
Chromium	10.6	0.472	1.89		mg/Kg-dry	5	10/23/19 11:28 AM
Lead	8.04	0.0944	0.283		mg/Kg-dry	5	10/23/19 11:28 AM
Selenium	1.55	0.142	0.472		mg/Kg-dry	5	10/23/19 11:28 AM
Silver	<0.0944	0.0944	0.189		mg/Kg-dry	5	10/23/19 11:28 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0378	0.0161	0.0402	J	mg/Kg-dry	1	10/25/19 11:18 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0529	0.0529	0.264		mg/Kg-dry	50	10/17/19 01:26 PM
Ethylbenzene	<0.0529	0.0529	0.264		mg/Kg-dry	50	10/17/19 01:26 PM
Toluene	<0.0529	0.0529	0.264		mg/Kg-dry	50	10/17/19 01:26 PM
Xylenes, Total	<0.0529	0.0529	0.264		mg/Kg-dry	50	10/17/19 01:26 PM
Surr: 1,2-Dichloroethane-d4	113	0	52-149		%REC	50	10/17/19 01:26 PM
Surr: 4-Bromofluorobenzene	100	0	84-118		%REC	50	10/17/19 01:26 PM
Surr: Dibromofluoromethane	102	0	65-135		%REC	50	10/17/19 01:26 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-2, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-02
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:35 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	102	0	84-116		%REC	50	10/17/19 01:26 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	5.43	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-2, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-03
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:38 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0501	0.0501	0.100		mg/Kg-dry	1	10/17/19 12:25 PM
Aroclor 1221	<0.0501	0.0501	0.100		mg/Kg-dry	1	10/17/19 12:25 PM
Aroclor 1232	<0.0501	0.0501	0.100		mg/Kg-dry	1	10/17/19 12:25 PM
Aroclor 1242	<0.0501	0.0501	0.100		mg/Kg-dry	1	10/17/19 12:25 PM
Aroclor 1248	<0.0501	0.0501	0.100		mg/Kg-dry	1	10/17/19 12:25 PM
Aroclor 1254	0.0997	0.0501	0.100	J	mg/Kg-dry	1	10/17/19 12:25 PM
Aroclor 1260	<0.0501	0.0501	0.100		mg/Kg-dry	1	10/17/19 12:25 PM
Total PCBs	0.0997	0.0501	0.100	J	mg/Kg-dry	1	10/17/19 12:25 PM
Surr: Decachlorobiphenyl	59.6	0	58-125		%REC	1	10/17/19 12:25 PM
Surr: Tetrachloro-m-xylene	93.0	0	40-130		%REC	1	10/17/19 12:25 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	1030	60.8	203		mg/Kg-dry	20	10/25/19 02:45 PM
TPH-ORO >C28-C35	2040	60.8	203		mg/Kg-dry	20	10/25/19 02:45 PM
Surr: Isopropylbenzene	107	0	47-142		%REC	20	10/25/19 02:45 PM
Surr: Octacosane	917	0	25-162	S	%REC	20	10/25/19 02:45 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.10	2.10	4.20		mg/Kg-dry	20	10/17/19 01:44 PM
Surr: Tetrachlorethene	117	0	70-134		%REC	20	10/17/19 01:44 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	2.18	0.460	0.921		mg/Kg-dry	5	10/23/19 11:30 AM
Barium	296	0.460	1.84		mg/Kg-dry	5	10/23/19 11:30 AM
Cadmium	0.535	0.0921	0.276		mg/Kg-dry	5	10/23/19 11:30 AM
Chromium	9.96	0.460	1.84		mg/Kg-dry	5	10/23/19 11:30 AM
Lead	8.57	0.0921	0.276		mg/Kg-dry	5	10/23/19 11:30 AM
Selenium	1.62	0.138	0.460		mg/Kg-dry	5	10/23/19 11:30 AM
Silver	<0.0921	0.0921	0.184		mg/Kg-dry	5	10/23/19 11:30 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0272	0.0163	0.0408	J	mg/Kg-dry	1	10/25/19 11:21 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0525	0.0525	0.262		mg/Kg-dry	50	10/17/19 01:57 PM
Ethylbenzene	<0.0525	0.0525	0.262		mg/Kg-dry	50	10/17/19 01:57 PM
Toluene	<0.0525	0.0525	0.262		mg/Kg-dry	50	10/17/19 01:57 PM
Xylenes, Total	<0.0525	0.0525	0.262		mg/Kg-dry	50	10/17/19 01:57 PM
Surr: 1,2-Dichloroethane-d4	113	0	52-149		%REC	50	10/17/19 01:57 PM
Surr: 4-Bromofluorobenzene	100	0	84-118		%REC	50	10/17/19 01:57 PM
Surr: Dibromofluoromethane	102	0	65-135		%REC	50	10/17/19 01:57 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-2, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-03
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:38 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	98.2	0	84-116		%REC	50	10/17/19 01:57 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	4.71	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-3, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-04
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:50 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0537	0.0537	0.107		mg/Kg-dry	1	10/17/19 12:50 PM
Aroclor 1221	<0.0537	0.0537	0.107		mg/Kg-dry	1	10/17/19 12:50 PM
Aroclor 1232	<0.0537	0.0537	0.107		mg/Kg-dry	1	10/17/19 12:50 PM
Aroclor 1242	<0.0537	0.0537	0.107		mg/Kg-dry	1	10/17/19 12:50 PM
Aroclor 1248	<0.0537	0.0537	0.107		mg/Kg-dry	1	10/17/19 12:50 PM
Aroclor 1254	0.462	0.0537	0.107		mg/Kg-dry	1	10/17/19 12:50 PM
Aroclor 1260	<0.0537	0.0537	0.107		mg/Kg-dry	1	10/17/19 12:50 PM
Total PCBs	0.462	0.0537	0.107		mg/Kg-dry	1	10/17/19 12:50 PM
Surr: Decachlorobiphenyl	76.0	0	58-125		%REC	1	10/17/19 12:50 PM
Surr: Tetrachloro-m-xylene	100	0	40-130		%REC	1	10/17/19 12:50 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	578	59.0	197		mg/Kg-dry	20	10/25/19 02:54 PM
TPH-ORO >C28-C35	1890	59.0	197		mg/Kg-dry	20	10/25/19 02:54 PM
Surr: Isopropylbenzene	104	0	47-142		%REC	20	10/25/19 02:54 PM
Surr: Octacosane	720	0	25-162	S	%REC	20	10/25/19 02:54 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.15	2.15	4.31		mg/Kg-dry	20	10/17/19 02:08 PM
Surr: Tetrachlorethene	120	0	70-134		%REC	20	10/17/19 02:08 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	2.60	0.449	0.898		mg/Kg-dry	5	10/23/19 11:32 AM
Barium	231	0.449	1.80		mg/Kg-dry	5	10/23/19 11:32 AM
Cadmium	0.306	0.0898	0.269		mg/Kg-dry	5	10/23/19 11:32 AM
Chromium	11.3	0.449	1.80		mg/Kg-dry	5	10/23/19 11:32 AM
Lead	5.85	0.0898	0.269		mg/Kg-dry	5	10/23/19 11:32 AM
Selenium	1.34	0.135	0.449		mg/Kg-dry	5	10/23/19 11:32 AM
Silver	<0.0898	0.0898	0.180		mg/Kg-dry	5	10/23/19 11:32 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0436	0.0171	0.0427		mg/Kg-dry	1	10/25/19 11:23 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0539	0.0539	0.269		mg/Kg-dry	50	10/17/19 02:28 PM
Ethylbenzene	<0.0539	0.0539	0.269		mg/Kg-dry	50	10/17/19 02:28 PM
Toluene	<0.0539	0.0539	0.269		mg/Kg-dry	50	10/17/19 02:28 PM
Xylenes, Total	<0.0539	0.0539	0.269		mg/Kg-dry	50	10/17/19 02:28 PM
Surr: 1,2-Dichloroethane-d4	114	0	52-149		%REC	50	10/17/19 02:28 PM
Surr: 4-Bromofluorobenzene	98.9	0	84-118		%REC	50	10/17/19 02:28 PM
Surr: Dibromofluoromethane	101	0	65-135		%REC	50	10/17/19 02:28 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-3, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-04
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:50 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	99.0	0	84-116		%REC	50	10/17/19 02:28 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	7.18	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-3, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-05
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:55 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0564	0.0564	0.113		mg/Kg-dry	1	10/17/19 01:15 PM
Aroclor 1221	<0.0564	0.0564	0.113		mg/Kg-dry	1	10/17/19 01:15 PM
Aroclor 1232	<0.0564	0.0564	0.113		mg/Kg-dry	1	10/17/19 01:15 PM
Aroclor 1242	<0.0564	0.0564	0.113		mg/Kg-dry	1	10/17/19 01:15 PM
Aroclor 1248	<0.0564	0.0564	0.113		mg/Kg-dry	1	10/17/19 01:15 PM
Aroclor 1254	0.175	0.0564	0.113		mg/Kg-dry	1	10/17/19 01:15 PM
Aroclor 1260	<0.0564	0.0564	0.113		mg/Kg-dry	1	10/17/19 01:15 PM
Total PCBs	0.175	0.0564	0.113		mg/Kg-dry	1	10/17/19 01:15 PM
Surr: Decachlorobiphenyl	71.6	0	58-125		%REC	1	10/17/19 01:15 PM
Surr: Tetrachloro-m-xylene	87.5	0	40-130		%REC	1	10/17/19 01:15 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	649	67.0	223		mg/Kg-dry	20	10/25/19 03:03 PM
TPH-ORO >C28-C35	2670	67.0	223		mg/Kg-dry	20	10/25/19 03:03 PM
Surr: Isopropylbenzene	137	0	47-142		%REC	20	10/25/19 03:03 PM
Surr: Octacosane	1420	0	25-162	S	%REC	20	10/25/19 03:03 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.29	2.29	4.58		mg/Kg-dry	20	10/17/19 02:32 PM
Surr: Tetrachlorethene	115	0	70-134		%REC	20	10/17/19 02:32 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.95	0.520	1.04		mg/Kg-dry	5	10/23/19 11:34 AM
Barium	287	0.520	2.08		mg/Kg-dry	5	10/23/19 11:34 AM
Cadmium	0.165	0.104	0.312	J	mg/Kg-dry	5	10/23/19 11:34 AM
Chromium	10.3	0.520	2.08		mg/Kg-dry	5	10/23/19 11:34 AM
Lead	3.92	0.104	0.312		mg/Kg-dry	5	10/23/19 11:34 AM
Selenium	1.19	0.156	0.520		mg/Kg-dry	5	10/23/19 11:34 AM
Silver	<0.104	0.104	0.208		mg/Kg-dry	5	10/23/19 11:34 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0522	0.0177	0.0442		mg/Kg-dry	1	10/25/19 11:25 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0572	0.0572	0.286		mg/Kg-dry	50	10/17/19 03:00 PM
Ethylbenzene	<0.0572	0.0572	0.286		mg/Kg-dry	50	10/17/19 03:00 PM
Toluene	<0.0572	0.0572	0.286		mg/Kg-dry	50	10/17/19 03:00 PM
Xylenes, Total	<0.0572	0.0572	0.286		mg/Kg-dry	50	10/17/19 03:00 PM
Surr: 1,2-Dichloroethane-d4	113	0	52-149		%REC	50	10/17/19 03:00 PM
Surr: 4-Bromofluorobenzene	101	0	84-118		%REC	50	10/17/19 03:00 PM
Surr: Dibromofluoromethane	99.7	0	65-135		%REC	50	10/17/19 03:00 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-3, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-05
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:55 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	99.3	0	84-116		%REC	50	10/17/19 03:00 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	12.6	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-4, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-06
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:55 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0548	0.0548	0.110		mg/Kg-dry	1	10/17/19 01:41 PM
Aroclor 1221	<0.0548	0.0548	0.110		mg/Kg-dry	1	10/17/19 01:41 PM
Aroclor 1232	<0.0548	0.0548	0.110		mg/Kg-dry	1	10/17/19 01:41 PM
Aroclor 1242	<0.0548	0.0548	0.110		mg/Kg-dry	1	10/17/19 01:41 PM
Aroclor 1248	<0.0548	0.0548	0.110		mg/Kg-dry	1	10/17/19 01:41 PM
Aroclor 1254	0.135	0.0548	0.110		mg/Kg-dry	1	10/17/19 01:41 PM
Aroclor 1260	<0.0548	0.0548	0.110		mg/Kg-dry	1	10/17/19 01:41 PM
Total PCBs	0.135	0.0548	0.110		mg/Kg-dry	1	10/17/19 01:41 PM
Surr: Decachlorobiphenyl	76.2	0	58-125		%REC	1	10/17/19 01:41 PM
Surr: Tetrachloro-m-xylene	98.2	0	40-130		%REC	1	10/17/19 01:41 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	662	65.7	219		mg/Kg-dry	20	10/25/19 03:12 PM
TPH-ORO >C28-C35	1610	65.7	219		mg/Kg-dry	20	10/25/19 03:12 PM
Surr: Isopropylbenzene	101	0	47-142		%REC	20	10/25/19 03:12 PM
Surr: Octacosane	715	0	25-162	S	%REC	20	10/25/19 03:12 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.23	2.23	4.47		mg/Kg-dry	20	10/17/19 04:32 PM
Surr: Tetrachlorethene	113	0	70-134		%REC	20	10/17/19 04:32 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	7.27	0.466	0.931		mg/Kg-dry	5	10/23/19 11:36 AM
Barium	321	0.466	1.86		mg/Kg-dry	5	10/23/19 11:36 AM
Cadmium	0.422	0.0931	0.279		mg/Kg-dry	5	10/23/19 11:36 AM
Chromium	13.6	0.466	1.86		mg/Kg-dry	5	10/23/19 11:36 AM
Lead	23.4	0.0931	0.279		mg/Kg-dry	5	10/23/19 11:36 AM
Selenium	1.36	0.140	0.466		mg/Kg-dry	5	10/23/19 11:36 AM
Silver	<0.0931	0.0931	0.186		mg/Kg-dry	5	10/23/19 11:36 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0630	0.0174	0.0436		mg/Kg-dry	1	10/25/19 11:27 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0559	0.0559	0.279		mg/Kg-dry	50	10/17/19 04:28 PM
Ethylbenzene	<0.0559	0.0559	0.279		mg/Kg-dry	50	10/17/19 04:28 PM
Toluene	<0.0559	0.0559	0.279		mg/Kg-dry	50	10/17/19 04:28 PM
Xylenes, Total	<0.0559	0.0559	0.279		mg/Kg-dry	50	10/17/19 04:28 PM
Surr: 1,2-Dichloroethane-d4	117	0	52-149		%REC	50	10/17/19 04:28 PM
Surr: 4-Bromofluorobenzene	103	0	84-118		%REC	50	10/17/19 04:28 PM
Surr: Dibromofluoromethane	103	0	65-135		%REC	50	10/17/19 04:28 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-4, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-06
Project No:	6-0141-12	**Collection Date:**	10/14/19 07:55 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	98.1	0	84-116		%REC	50	10/17/19 04:28 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	10.5	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-5, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-07
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:10 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0543	0.0543	0.109		mg/Kg-dry	1	10/17/19 02:06 PM
Aroclor 1221	<0.0543	0.0543	0.109		mg/Kg-dry	1	10/17/19 02:06 PM
Aroclor 1232	<0.0543	0.0543	0.109		mg/Kg-dry	1	10/17/19 02:06 PM
Aroclor 1242	<0.0543	0.0543	0.109		mg/Kg-dry	1	10/17/19 02:06 PM
Aroclor 1248	<0.0543	0.0543	0.109		mg/Kg-dry	1	10/17/19 02:06 PM
Aroclor 1254	1.41	0.0543	0.109		mg/Kg-dry	1	10/17/19 02:06 PM
Aroclor 1260	<0.0543	0.0543	0.109		mg/Kg-dry	1	10/17/19 02:06 PM
Total PCBs	1.41	0.0543	0.109		mg/Kg-dry	1	10/17/19 02:06 PM
Surr: Decachlorobiphenyl	72.2	0	58-125		%REC	1	10/17/19 02:06 PM
Surr: Tetrachloro-m-xylene	104	0	40-130		%REC	1	10/17/19 02:06 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	1010	66.3	221		mg/Kg-dry	20	10/25/19 03:21 PM
TPH-ORO >C28-C35	4230	66.3	221		mg/Kg-dry	20	10/25/19 03:21 PM
Surr: Isopropylbenzene	99.4	0	47-142		%REC	20	10/25/19 03:21 PM
Surr: Octacosane	1420	0	25-162	S	%REC	20	10/25/19 03:21 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	2.29	2.24	4.47	J	mg/Kg-dry	20	10/17/19 04:57 PM
Surr: Tetrachlorethene	110	0	70-134		%REC	20	10/17/19 04:57 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.61	0.499	0.998		mg/Kg-dry	5	10/23/19 11:22 AM
Barium	146	0.499	2.00		mg/Kg-dry	5	10/23/19 11:22 AM
Cadmium	0.633	0.0998	0.299		mg/Kg-dry	5	10/23/19 11:22 AM
Chromium	46.9	0.499	2.00		mg/Kg-dry	5	10/23/19 11:22 AM
Lead	18.2	0.0998	0.299		mg/Kg-dry	5	10/23/19 11:22 AM
Selenium	1.15	0.150	0.499		mg/Kg-dry	5	10/23/19 11:22 AM
Silver	<0.0998	0.0998	0.200		mg/Kg-dry	5	10/23/19 11:22 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.233	0.0164	0.0411		mg/Kg-dry	1	10/25/19 11:30 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0559	0.0559	0.279		mg/Kg-dry	50	10/17/19 05:00 PM
Ethylbenzene	<0.0559	0.0559	0.279		mg/Kg-dry	50	10/17/19 05:00 PM
Toluene	<0.0559	0.0559	0.279		mg/Kg-dry	50	10/17/19 05:00 PM
Xylenes, Total	<0.0559	0.0559	0.279		mg/Kg-dry	50	10/17/19 05:00 PM
Surr: 1,2-Dichloroethane-d4	114	0	52-149		%REC	50	10/17/19 05:00 PM
Surr: 4-Bromofluorobenzene	104	0	84-118		%REC	50	10/17/19 05:00 PM
Surr: Dibromofluoromethane	101	0	65-135		%REC	50	10/17/19 05:00 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-5, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-07
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:10 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	96.7	0	84-116		%REC	50	10/17/19 05:00 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	10.5	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-6, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-08
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:05 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0578	0.0578	0.116		mg/Kg-dry	1	10/17/19 02:31 PM
Aroclor 1221	<0.0578	0.0578	0.116		mg/Kg-dry	1	10/17/19 02:31 PM
Aroclor 1232	<0.0578	0.0578	0.116		mg/Kg-dry	1	10/17/19 02:31 PM
Aroclor 1242	<0.0578	0.0578	0.116		mg/Kg-dry	1	10/17/19 02:31 PM
Aroclor 1248	<0.0578	0.0578	0.116		mg/Kg-dry	1	10/17/19 02:31 PM
Aroclor 1254	0.166	0.0578	0.116		mg/Kg-dry	1	10/17/19 02:31 PM
Aroclor 1260	<0.0578	0.0578	0.116		mg/Kg-dry	1	10/17/19 02:31 PM
Total PCBs	0.166	0.0578	0.116		mg/Kg-dry	1	10/17/19 02:31 PM
Surr: Decachlorobiphenyl	73.4	0	58-125		%REC	1	10/17/19 02:31 PM
Surr: Tetrachloro-m-xylene	91.5	0	40-130		%REC	1	10/17/19 02:31 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	343	74.2	247		mg/Kg-dry	20	10/25/19 04:35 PM
TPH-ORO >C28-C35	948	74.2	247		mg/Kg-dry	20	10/25/19 04:35 PM
Surr: Isopropylbenzene	100	0	47-142		%REC	20	10/25/19 04:35 PM
Surr: Octacosane	375	0	25-162	S	%REC	20	10/25/19 04:35 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.49	2.49	4.98		mg/Kg-dry	20	10/17/19 05:21 PM
Surr: Tetrachlorethene	121	0	70-134		%REC	20	10/17/19 05:21 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	4.66	0.593	1.19		mg/Kg-dry	5	10/23/19 11:38 AM
Barium	132	0.593	2.37		mg/Kg-dry	5	10/23/19 11:38 AM
Cadmium	0.534	0.119	0.356		mg/Kg-dry	5	10/23/19 11:38 AM
Chromium	21.3	0.593	2.37		mg/Kg-dry	5	10/23/19 11:38 AM
Lead	15.7	0.119	0.356		mg/Kg-dry	5	10/23/19 11:38 AM
Selenium	0.893	0.178	0.593		mg/Kg-dry	5	10/23/19 11:38 AM
Silver	<0.119	0.119	0.237		mg/Kg-dry	5	10/23/19 11:38 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.150	0.0190	0.0476		mg/Kg-dry	1	10/25/19 11:32 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0622	0.0622	0.311		mg/Kg-dry	50	10/17/19 04:34 PM
Ethylbenzene	<0.0622	0.0622	0.311		mg/Kg-dry	50	10/17/19 04:34 PM
Toluene	<0.0622	0.0622	0.311		mg/Kg-dry	50	10/17/19 04:34 PM
Xylenes, Total	<0.0622	0.0622	0.311		mg/Kg-dry	50	10/17/19 04:34 PM
Surr: 1,2-Dichloroethane-d4	115	0	52-149		%REC	50	10/17/19 04:34 PM
Surr: 4-Bromofluorobenzene	102	0	84-118		%REC	50	10/17/19 04:34 PM
Surr: Dibromofluoromethane	100	0	65-135		%REC	50	10/17/19 04:34 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-6, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-08
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:05 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	97.3	0	84-116		%REC	50	10/17/19 04:34 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	19.7	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-6, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-09
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:09 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0678	0.0678	0.136		mg/Kg-dry	1	10/17/19 02:57 PM
Aroclor 1221	<0.0678	0.0678	0.136		mg/Kg-dry	1	10/17/19 02:57 PM
Aroclor 1232	<0.0678	0.0678	0.136		mg/Kg-dry	1	10/17/19 02:57 PM
Aroclor 1242	<0.0678	0.0678	0.136		mg/Kg-dry	1	10/17/19 02:57 PM
Aroclor 1248	<0.0678	0.0678	0.136		mg/Kg-dry	1	10/17/19 02:57 PM
Aroclor 1254	<0.0678	0.0678	0.136		mg/Kg-dry	1	10/17/19 02:57 PM
Aroclor 1260	<0.0678	0.0678	0.136		mg/Kg-dry	1	10/17/19 02:57 PM
Total PCBs	<0.0678	0.0678	0.136		mg/Kg-dry	1	10/17/19 02:57 PM
Surr: Decachlorobiphenyl	75.6	0	58-125		%REC	1	10/17/19 02:57 PM
Surr: Tetrachloro-m-xylene	97.9	0	40-130		%REC	1	10/17/19 02:57 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	36.3	4.16	13.9		mg/Kg-dry	1	10/25/19 02:27 PM
TPH-ORO >C28-C35	95.1	4.16	13.9		mg/Kg-dry	1	10/25/19 02:27 PM
Surr: Isopropylbenzene	58.5	0	47-142		%REC	1	10/25/19 02:27 PM
Surr: Octacosane	105	0	25-162		%REC	1	10/25/19 02:27 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.86	2.86	5.72		mg/Kg-dry	20	10/17/19 05:45 PM
Surr: Tetrachlorethene	129	0	70-134		%REC	20	10/17/19 05:45 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	4.46	0.581	1.16		mg/Kg-dry	5	10/23/19 11:40 AM
Barium	73.0	0.581	2.32		mg/Kg-dry	5	10/23/19 11:40 AM
Cadmium	<0.116	0.116	0.349		mg/Kg-dry	5	10/23/19 11:40 AM
Chromium	16.4	0.581	2.32		mg/Kg-dry	5	10/23/19 11:40 AM
Lead	7.27	0.116	0.349		mg/Kg-dry	5	10/23/19 11:40 AM
Selenium	0.586	0.174	0.581		mg/Kg-dry	5	10/23/19 11:40 AM
Silver	<0.116	0.116	0.232		mg/Kg-dry	5	10/23/19 11:40 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	<0.0219	0.0219	0.0547		mg/Kg-dry	1	10/25/19 11:34 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0714	0.0714	0.357		mg/Kg-dry	50	10/17/19 05:05 PM
Ethylbenzene	<0.0714	0.0714	0.357		mg/Kg-dry	50	10/17/19 05:05 PM
Toluene	<0.0714	0.0714	0.357		mg/Kg-dry	50	10/17/19 05:05 PM
Xylenes, Total	<0.0714	0.0714	0.357		mg/Kg-dry	50	10/17/19 05:05 PM
Surr: 1,2-Dichloroethane-d4	109	0	52-149		%REC	50	10/17/19 05:05 PM
Surr: 4-Bromofluorobenzene	100	0	84-118		%REC	50	10/17/19 05:05 PM
Surr: Dibromofluoromethane	99.6	0	65-135		%REC	50	10/17/19 05:05 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-6, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-09
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:09 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	98.0	0	84-116		%REC	50	10/17/19 05:05 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	30.0	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-7, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-10
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:22 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0551	0.0551	0.110		mg/Kg-dry	1	10/17/19 04:38 PM
Aroclor 1221	<0.0551	0.0551	0.110		mg/Kg-dry	1	10/17/19 04:38 PM
Aroclor 1232	<0.0551	0.0551	0.110		mg/Kg-dry	1	10/17/19 04:38 PM
Aroclor 1242	<0.0551	0.0551	0.110		mg/Kg-dry	1	10/17/19 04:38 PM
Aroclor 1248	<0.0551	0.0551	0.110		mg/Kg-dry	1	10/17/19 04:38 PM
Aroclor 1254	<0.0551	0.0551	0.110		mg/Kg-dry	1	10/17/19 04:38 PM
Aroclor 1260	<0.0551	0.0551	0.110		mg/Kg-dry	1	10/17/19 04:38 PM
Total PCBs	<0.0551	0.0551	0.110		mg/Kg-dry	1	10/17/19 04:38 PM
Surr: Decachlorobiphenyl	80.3	0	58-125		%REC	1	10/17/19 04:38 PM
Surr: Tetrachloro-m-xylene	102	0	40-130		%REC	1	10/17/19 04:38 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	365	66.7	222		mg/Kg-dry	20	10/25/19 03:39 PM
TPH-ORO >C28-C35	498	66.7	222		mg/Kg-dry	20	10/25/19 03:39 PM
Surr: Isopropylbenzene	121	0	47-142		%REC	20	10/25/19 03:39 PM
Surr: Octacosane	382	0	25-162	S	%REC	20	10/25/19 03:39 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.35	2.35	4.70		mg/Kg-dry	20	10/17/19 06:09 PM
Surr: Tetrachlorethene	125	0	70-134		%REC	20	10/17/19 06:09 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	6.82	0.490	0.980		mg/Kg-dry	5	10/23/19 11:42 AM
Barium	306	0.490	1.96		mg/Kg-dry	5	10/23/19 11:42 AM
Cadmium	0.292	0.0980	0.294	J	mg/Kg-dry	5	10/23/19 11:42 AM
Chromium	32.9	0.490	1.96		mg/Kg-dry	5	10/23/19 11:42 AM
Lead	28.4	0.0980	0.294		mg/Kg-dry	5	10/23/19 11:42 AM
Selenium	2.37	0.147	0.490		mg/Kg-dry	5	10/23/19 11:42 AM
Silver	<0.0980	0.0980	0.196		mg/Kg-dry	5	10/23/19 11:42 AM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.240	0.0186	0.0465		mg/Kg-dry	1	10/25/19 11:37 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0588	0.0588	0.294		mg/Kg-dry	50	10/17/19 05:36 PM
Ethylbenzene	<0.0588	0.0588	0.294		mg/Kg-dry	50	10/17/19 05:36 PM
Toluene	<0.0588	0.0588	0.294		mg/Kg-dry	50	10/17/19 05:36 PM
Xylenes, Total	<0.0588	0.0588	0.294		mg/Kg-dry	50	10/17/19 05:36 PM
Surr: 1,2-Dichloroethane-d4	118	0	52-149		%REC	50	10/17/19 05:36 PM
Surr: 4-Bromofluorobenzene	103	0	84-118		%REC	50	10/17/19 05:36 PM
Surr: Dibromofluoromethane	102	0	65-135		%REC	50	10/17/19 05:36 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-7, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-10
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:22 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	97.1	0	84-116		%REC	50	10/17/19 05:36 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.0	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-7, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-11
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:25 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0561	0.0561	0.112		mg/Kg-dry	1	10/17/19 05:03 PM
Aroclor 1221	<0.0561	0.0561	0.112		mg/Kg-dry	1	10/17/19 05:03 PM
Aroclor 1232	<0.0561	0.0561	0.112		mg/Kg-dry	1	10/17/19 05:03 PM
Aroclor 1242	<0.0561	0.0561	0.112		mg/Kg-dry	1	10/17/19 05:03 PM
Aroclor 1248	<0.0561	0.0561	0.112		mg/Kg-dry	1	10/17/19 05:03 PM
Aroclor 1254	<0.0561	0.0561	0.112		mg/Kg-dry	1	10/17/19 05:03 PM
Aroclor 1260	<0.0561	0.0561	0.112		mg/Kg-dry	1	10/17/19 05:03 PM
Total PCBs	<0.0561	0.0561	0.112		mg/Kg-dry	1	10/17/19 05:03 PM
Surr: Decachlorobiphenyl	89.4	0	58-125		%REC	1	10/17/19 05:03 PM
Surr: Tetrachloro-m-xylene	99.8	0	40-130		%REC	1	10/17/19 05:03 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	26.7	3.47	11.6		mg/Kg-dry	1	10/25/19 02:36 PM
TPH-ORO >C28-C35	43.3	3.47	11.6		mg/Kg-dry	1	10/25/19 02:36 PM
Surr: Isopropylbenzene	67.0	0	47-142		%REC	1	10/25/19 02:36 PM
Surr: Octacosane	110	0	25-162		%REC	1	10/25/19 02:36 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.37	2.37	4.74		mg/Kg-dry	20	10/17/19 06:33 PM
Surr: Tetrachlorethene	80.7	0	70-134		%REC	20	10/17/19 06:33 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	7.67	0.506	1.01		mg/Kg-dry	5	10/23/19 12:09 PM
Barium	508	5.06	20.3		mg/Kg-dry	50	10/23/19 01:56 PM
Cadmium	0.214	0.101	0.304	J	mg/Kg-dry	5	10/23/19 12:09 PM
Chromium	26.8	0.506	2.03		mg/Kg-dry	5	10/23/19 12:09 PM
Lead	10.6	0.101	0.304		mg/Kg-dry	5	10/23/19 12:09 PM
Selenium	3.53	0.152	0.506		mg/Kg-dry	5	10/23/19 12:09 PM
Silver	<0.101	0.101	0.203		mg/Kg-dry	5	10/23/19 12:09 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	<0.0176	0.0176	0.0441		mg/Kg-dry	1	10/25/19 11:44 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0592	0.0592	0.296		mg/Kg-dry	50	10/17/19 06:07 PM
Ethylbenzene	<0.0592	0.0592	0.296		mg/Kg-dry	50	10/17/19 06:07 PM
Toluene	<0.0592	0.0592	0.296		mg/Kg-dry	50	10/17/19 06:07 PM
Xylenes, Total	<0.0592	0.0592	0.296		mg/Kg-dry	50	10/17/19 06:07 PM
Surr: 1,2-Dichloroethane-d4	117	0	52-149		%REC	50	10/17/19 06:07 PM
Surr: 4-Bromofluorobenzene	99.3	0	84-118		%REC	50	10/17/19 06:07 PM
Surr: Dibromofluoromethane	100	0	65-135		%REC	50	10/17/19 06:07 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-7, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-11
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:25 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	97.0	0	84-116		%REC	50	10/17/19 06:07 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.6	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-8, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-12
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:20 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0559	0.0559	0.112		mg/Kg-dry	1	10/17/19 05:29 PM
Aroclor 1221	<0.0559	0.0559	0.112		mg/Kg-dry	1	10/17/19 05:29 PM
Aroclor 1232	<0.0559	0.0559	0.112		mg/Kg-dry	1	10/17/19 05:29 PM
Aroclor 1242	<0.0559	0.0559	0.112		mg/Kg-dry	1	10/17/19 05:29 PM
Aroclor 1248	<0.0559	0.0559	0.112		mg/Kg-dry	1	10/17/19 05:29 PM
Aroclor 1254	0.708	0.0559	0.112		mg/Kg-dry	1	10/17/19 05:29 PM
Aroclor 1260	<0.0559	0.0559	0.112		mg/Kg-dry	1	10/17/19 05:29 PM
Total PCBs	0.708	0.0559	0.112		mg/Kg-dry	1	10/17/19 05:29 PM
Surr: Decachlorobiphenyl	78.3	0	58-125		%REC	1	10/17/19 05:29 PM
Surr: Tetrachloro-m-xylene	92.7	0	40-130		%REC	1	10/17/19 05:29 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	1260	69.3	231		mg/Kg-dry	20	10/25/19 03:48 PM
TPH-ORO >C28-C35	1040	69.3	231		mg/Kg-dry	20	10/25/19 03:48 PM
Surr: Isopropylbenzene	94.6	0	47-142		%REC	20	10/25/19 03:48 PM
Surr: Octacosane	590	0	25-162	S	%REC	20	10/25/19 03:48 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.43	2.43	4.85		mg/Kg-dry	20	10/17/19 06:57 PM
Surr: Tetrachlorethene	101	0	70-134		%REC	20	10/17/19 06:57 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	4.81	0.547	1.09		mg/Kg-dry	5	10/23/19 12:11 PM
Barium	228	0.547	2.19		mg/Kg-dry	5	10/23/19 12:11 PM
Cadmium	0.209	0.109	0.328	J	mg/Kg-dry	5	10/23/19 12:11 PM
Chromium	19.5	0.547	2.19		mg/Kg-dry	5	10/23/19 12:11 PM
Lead	13.9	0.109	0.328		mg/Kg-dry	5	10/23/19 12:11 PM
Selenium	1.25	0.164	0.547		mg/Kg-dry	5	10/23/19 12:11 PM
Silver	<0.109	0.109	0.219		mg/Kg-dry	5	10/23/19 12:11 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.111	0.0185	0.0463		mg/Kg-dry	1	10/25/19 11:47 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0607	0.0607	0.303		mg/Kg-dry	50	10/17/19 06:38 PM
Ethylbenzene	<0.0607	0.0607	0.303		mg/Kg-dry	50	10/17/19 06:38 PM
Toluene	<0.0607	0.0607	0.303		mg/Kg-dry	50	10/17/19 06:38 PM
Xylenes, Total	<0.0607	0.0607	0.303		mg/Kg-dry	50	10/17/19 06:38 PM
Surr: 1,2-Dichloroethane-d4	113	0	52-149		%REC	50	10/17/19 06:38 PM
Surr: 4-Bromofluorobenzene	103	0	84-118		%REC	50	10/17/19 06:38 PM
Surr: Dibromofluoromethane	98.9	0	65-135		%REC	50	10/17/19 06:38 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-8, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-12
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:20 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	99.2	0	84-116		%REC	50	10/17/19 06:38 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	17.6	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-9, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-13
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:50 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0584	0.0584	0.117		mg/Kg-dry	1	10/17/19 05:54 PM
Aroclor 1221	<0.0584	0.0584	0.117		mg/Kg-dry	1	10/17/19 05:54 PM
Aroclor 1232	<0.0584	0.0584	0.117		mg/Kg-dry	1	10/17/19 05:54 PM
Aroclor 1242	<0.0584	0.0584	0.117		mg/Kg-dry	1	10/17/19 05:54 PM
Aroclor 1248	<0.0584	0.0584	0.117		mg/Kg-dry	1	10/17/19 05:54 PM
Aroclor 1254	7.62	0.292	0.584		mg/Kg-dry	5	10/21/19 02:42 PM
Aroclor 1260	<0.0584	0.0584	0.117		mg/Kg-dry	1	10/17/19 05:54 PM
Total PCBs	7.62	0.292	0.584		mg/Kg-dry	5	10/21/19 02:42 PM
Surr: Decachlorobiphenyl	82.0	0	58-125		%REC	1	10/17/19 05:54 PM
Surr: Decachlorobiphenyl	81.5	0	58-125		%REC	5	10/21/19 02:42 PM
Surr: Tetrachloro-m-xylene	104	0	40-130		%REC	1	10/17/19 05:54 PM
Surr: Tetrachloro-m-xylene	110	0	40-130		%REC	5	10/21/19 02:42 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	504	67.9	226		mg/Kg-dry	20	10/25/19 03:57 PM
TPH-ORO >C28-C35	1850	67.9	226		mg/Kg-dry	20	10/25/19 03:57 PM
Surr: Isopropylbenzene	88.5	0	47-142		%REC	20	10/25/19 03:57 PM
Surr: Octacosane	612	0	25-162	S	%REC	20	10/25/19 03:57 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.38	2.38	4.76		mg/Kg-dry	20	10/17/19 07:21 PM
Surr: Tetrachlorethene	104	0	70-134		%REC	20	10/17/19 07:21 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	5.97	0.573	1.15		mg/Kg-dry	5	10/23/19 12:13 PM
Barium	314	0.573	2.29		mg/Kg-dry	5	10/23/19 12:13 PM
Cadmium	0.658	0.115	0.344		mg/Kg-dry	5	10/23/19 12:13 PM
Chromium	83.4	0.573	2.29		mg/Kg-dry	5	10/23/19 12:13 PM
Lead	13.8	0.115	0.344		mg/Kg-dry	5	10/23/19 12:13 PM
Selenium	1.24	0.172	0.573		mg/Kg-dry	5	10/23/19 12:13 PM
Silver	<0.115	0.115	0.229		mg/Kg-dry	5	10/23/19 12:13 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.278	0.0187	0.0468		mg/Kg-dry	1	10/25/19 11:49 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0596	0.0596	0.298		mg/Kg-dry	50	10/17/19 07:10 PM
Ethylbenzene	<0.0596	0.0596	0.298		mg/Kg-dry	50	10/17/19 07:10 PM
Toluene	<0.0596	0.0596	0.298		mg/Kg-dry	50	10/17/19 07:10 PM
Xylenes, Total	<0.0596	0.0596	0.298		mg/Kg-dry	50	10/17/19 07:10 PM
Surr: 1,2-Dichloroethane-d4	114	0	52-149		%REC	50	10/17/19 07:10 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-9, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-13
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:50 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: 4-Bromofluorobenzene	104	0	84-118		%REC	50	10/17/19 07:10 PM
Surr: Dibromofluoromethane	100	0	65-135		%REC	50	10/17/19 07:10 PM
Surr: Toluene-d8	99.0	0	84-116		%REC	50	10/17/19 07:10 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	16.0	0	0		WT%	1	10/23/19 08:45 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-9, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-14
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:52 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0597	0.0597	0.119		mg/Kg-dry	1	10/17/19 06:19 PM
Aroclor 1221	<0.0597	0.0597	0.119		mg/Kg-dry	1	10/17/19 06:19 PM
Aroclor 1232	<0.0597	0.0597	0.119		mg/Kg-dry	1	10/17/19 06:19 PM
Aroclor 1242	<0.0597	0.0597	0.119		mg/Kg-dry	1	10/17/19 06:19 PM
Aroclor 1248	<0.0597	0.0597	0.119		mg/Kg-dry	1	10/17/19 06:19 PM
Aroclor 1254	5.81	0.0597	0.119		mg/Kg-dry	1	10/17/19 06:19 PM
Aroclor 1260	<0.0597	0.0597	0.119		mg/Kg-dry	1	10/17/19 06:19 PM
Total PCBs	5.81	0.0597	0.119		mg/Kg-dry	1	10/17/19 06:19 PM
Surr: Decachlorobiphenyl	84.3	0	58-125		%REC	1	10/17/19 06:19 PM
Surr: Tetrachloro-m-xylene	105	0	40-130		%REC	1	10/17/19 06:19 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	247	69.0	230		mg/Kg-dry	20	10/25/19 04:06 PM
TPH-ORO >C28-C35	989	69.0	230		mg/Kg-dry	20	10/25/19 04:06 PM
Surr: Isopropylbenzene	92.2	0	47-142		%REC	20	10/25/19 04:06 PM
Surr: Octacosane	614	0	25-162	S	%REC	20	10/25/19 04:06 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.45	2.45	4.89		mg/Kg-dry	20	10/17/19 08:10 PM
Surr: Tetrachlorethene	107	0	70-134		%REC	20	10/17/19 08:10 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.87	0.532	1.06		mg/Kg-dry	5	10/23/19 12:15 PM
Barium	193	0.532	2.13		mg/Kg-dry	5	10/23/19 12:15 PM
Cadmium	0.326	0.106	0.319		mg/Kg-dry	5	10/23/19 12:15 PM
Chromium	59.8	0.532	2.13		mg/Kg-dry	5	10/23/19 12:15 PM
Lead	10.4	0.106	0.319		mg/Kg-dry	5	10/23/19 12:15 PM
Selenium	1.10	0.160	0.532		mg/Kg-dry	5	10/23/19 12:15 PM
Silver	<0.106	0.106	0.213		mg/Kg-dry	5	10/23/19 12:15 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.123	0.0181	0.0451		mg/Kg-dry	1	10/25/19 11:51 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0612	0.0612	0.306		mg/Kg-dry	50	10/17/19 07:41 PM
Ethylbenzene	<0.0612	0.0612	0.306		mg/Kg-dry	50	10/17/19 07:41 PM
Toluene	<0.0612	0.0612	0.306		mg/Kg-dry	50	10/17/19 07:41 PM
Xylenes, Total	<0.0612	0.0612	0.306		mg/Kg-dry	50	10/17/19 07:41 PM
Surr: 1,2-Dichloroethane-d4	118	0	52-149		%REC	50	10/17/19 07:41 PM
Surr: 4-Bromofluorobenzene	101	0	84-118		%REC	50	10/17/19 07:41 PM
Surr: Dibromofluoromethane	102	0	65-135		%REC	50	10/17/19 07:41 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-9, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-14
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:52 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	98.2	0	84-116		%REC	50	10/17/19 07:41 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	18.2	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-10, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-15
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:55 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0633	0.0633	0.127		mg/Kg-dry	1	10/17/19 06:45 PM
Aroclor 1221	<0.0633	0.0633	0.127		mg/Kg-dry	1	10/17/19 06:45 PM
Aroclor 1232	<0.0633	0.0633	0.127		mg/Kg-dry	1	10/17/19 06:45 PM
Aroclor 1242	<0.0633	0.0633	0.127		mg/Kg-dry	1	10/17/19 06:45 PM
Aroclor 1248	<0.0633	0.0633	0.127		mg/Kg-dry	1	10/17/19 06:45 PM
Aroclor 1254	0.0841	0.0633	0.127	J	mg/Kg-dry	1	10/17/19 06:45 PM
Aroclor 1260	<0.0633	0.0633	0.127		mg/Kg-dry	1	10/17/19 06:45 PM
Total PCBs	0.0841	0.0633	0.127	J	mg/Kg-dry	1	10/17/19 06:45 PM
Surr: Decachlorobiphenyl	73.1	0	58-125		%REC	1	10/17/19 06:45 PM
Surr: Tetrachloro-m-xylene	101	0	40-130		%REC	1	10/17/19 06:45 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	696	75.9	253		mg/Kg-dry	20	10/25/19 04:15 PM
TPH-ORO >C28-C35	2310	75.9	253		mg/Kg-dry	20	10/25/19 04:15 PM
Surr: Isopropylbenzene	113	0	47-142		%REC	20	10/25/19 04:15 PM
Surr: Octacosane	760	0	25-162	S	%REC	20	10/25/19 04:15 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.55	2.55	5.10		mg/Kg-dry	20	10/17/19 08:34 PM
Surr: Tetrachlorethene	78.5	0	70-134		%REC	20	10/17/19 08:34 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.59	0.569	1.14		mg/Kg-dry	5	10/23/19 12:17 PM
Barium	114	0.569	2.28		mg/Kg-dry	5	10/23/19 12:17 PM
Cadmium	0.318	0.114	0.342	J	mg/Kg-dry	5	10/23/19 12:17 PM
Chromium	16.0	0.569	2.28		mg/Kg-dry	5	10/23/19 12:17 PM
Lead	11.7	0.114	0.342		mg/Kg-dry	5	10/23/19 12:17 PM
Selenium	1.02	0.171	0.569		mg/Kg-dry	5	10/23/19 12:17 PM
Silver	<0.114	0.114	0.228		mg/Kg-dry	5	10/23/19 12:17 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	1.26	0.0976	0.244		mg/Kg-dry	5	10/25/19 12:54 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0638	0.0638	0.319		mg/Kg-dry	50	10/17/19 08:12 PM
Ethylbenzene	<0.0638	0.0638	0.319		mg/Kg-dry	50	10/17/19 08:12 PM
Toluene	<0.0638	0.0638	0.319		mg/Kg-dry	50	10/17/19 08:12 PM
Xylenes, Total	<0.0638	0.0638	0.319		mg/Kg-dry	50	10/17/19 08:12 PM
Surr: 1,2-Dichloroethane-d4	117	0	52-149		%REC	50	10/17/19 08:12 PM
Surr: 4-Bromofluorobenzene	102	0	84-118		%REC	50	10/17/19 08:12 PM
Surr: Dibromofluoromethane	100	0	65-135		%REC	50	10/17/19 08:12 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-10, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-15
Project No:	6-0141-12	**Collection Date:**	10/14/19 08:55 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	102	0	84-116		%REC	50	10/17/19 08:12 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	21.6	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-11, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-17
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:10 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/17/19 07:10 PM
Aroclor 1221	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/17/19 07:10 PM
Aroclor 1232	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/17/19 07:10 PM
Aroclor 1242	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/17/19 07:10 PM
Aroclor 1248	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/17/19 07:10 PM
Aroclor 1254	0.140	0.0590	0.118		mg/Kg-dry	1	10/17/19 07:10 PM
Aroclor 1260	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/17/19 07:10 PM
Total PCBs	0.140	0.0590	0.118		mg/Kg-dry	1	10/17/19 07:10 PM
Surr: Decachlorobiphenyl	76.5	0	58-125		%REC	1	10/17/19 07:10 PM
Surr: Tetrachloro-m-xylene	96.5	0	40-130		%REC	1	10/17/19 07:10 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	767	35.4	118		mg/Kg-dry	10	10/28/19 11:01 AM
TPH-ORO >C28-C35	2400	35.4	118		mg/Kg-dry	10	10/28/19 11:01 AM
Surr: Isopropylbenzene	87.6	0	47-142		%REC	10	10/28/19 11:01 AM
Surr: Octacosane	766	0	25-162	S	%REC	10	10/28/19 11:01 AM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.40	2.40	4.80		mg/Kg-dry	20	10/21/19 01:28 PM
Surr: Tetrachlorethene	124	0	70-134		%REC	20	10/21/19 01:28 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	2.80	0.526	1.05		mg/Kg-dry	5	10/23/19 12:19 PM
Barium	81.3	0.526	2.11		mg/Kg-dry	5	10/23/19 12:19 PM
Cadmium	0.284	0.105	0.316	J	mg/Kg-dry	5	10/23/19 12:19 PM
Chromium	25.2	0.526	2.11		mg/Kg-dry	5	10/23/19 12:19 PM
Lead	5.11	0.105	0.316		mg/Kg-dry	5	10/23/19 12:19 PM
Selenium	1.20	0.158	0.526		mg/Kg-dry	5	10/23/19 12:19 PM
Silver	<0.105	0.105	0.211		mg/Kg-dry	5	10/23/19 12:19 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0714	0.0181	0.0452		mg/Kg-dry	1	10/25/19 11:56 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0600	0.0600	0.300		mg/Kg-dry	50	10/18/19 03:53 PM
Ethylbenzene	<0.0600	0.0600	0.300		mg/Kg-dry	50	10/18/19 03:53 PM
Toluene	<0.0600	0.0600	0.300		mg/Kg-dry	50	10/18/19 03:53 PM
Xylenes, Total	<0.0600	0.0600	0.300		mg/Kg-dry	50	10/18/19 03:53 PM
Surr: 1,2-Dichloroethane-d4	100	0	52-149		%REC	50	10/18/19 03:53 PM
Surr: 4-Bromofluorobenzene	94.9	0	84-118		%REC	50	10/18/19 03:53 PM
Surr: Dibromofluoromethane	99.7	0	65-135		%REC	50	10/18/19 03:53 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-11, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-17
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:10 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	95.9	0	84-116		%REC	50	10/18/19 03:53 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	16.7	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-11, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-18
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:12 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0628	0.0628	0.126		mg/Kg-dry	1	10/17/19 07:35 PM
Aroclor 1221	<0.0628	0.0628	0.126		mg/Kg-dry	1	10/17/19 07:35 PM
Aroclor 1232	<0.0628	0.0628	0.126		mg/Kg-dry	1	10/17/19 07:35 PM
Aroclor 1242	<0.0628	0.0628	0.126		mg/Kg-dry	1	10/17/19 07:35 PM
Aroclor 1248	<0.0628	0.0628	0.126		mg/Kg-dry	1	10/17/19 07:35 PM
Aroclor 1254	0.149	0.0628	0.126		mg/Kg-dry	1	10/17/19 07:35 PM
Aroclor 1260	<0.0628	0.0628	0.126		mg/Kg-dry	1	10/17/19 07:35 PM
Total PCBs	0.149	0.0628	0.126		mg/Kg-dry	1	10/17/19 07:35 PM
Surr: Decachlorobiphenyl	74.7	0	58-125		%REC	1	10/17/19 07:35 PM
Surr: Tetrachloro-m-xylene	92.7	0	40-130		%REC	1	10/17/19 07:35 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	1590	179	595		mg/Kg-dry	50	10/28/19 03:27 PM
TPH-ORO >C28-C35	4770	179	595		mg/Kg-dry	50	10/28/19 03:27 PM
Surr: Isopropylbenzene	115	0	47-142		%REC	50	10/28/19 03:27 PM
Surr: Octacosane	1070	0	25-162	S	%REC	50	10/28/19 03:27 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.54	2.54	5.07		mg/Kg-dry	20	10/21/19 01:53 PM
Surr: Tetrachlorethene	121	0	70-134		%REC	20	10/21/19 01:53 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.08	0.556	1.11		mg/Kg-dry	5	10/23/19 12:21 PM
Barium	89.6	0.556	2.22		mg/Kg-dry	5	10/23/19 12:21 PM
Cadmium	0.242	0.111	0.334	J	mg/Kg-dry	5	10/23/19 12:21 PM
Chromium	40.3	0.556	2.22		mg/Kg-dry	5	10/23/19 12:21 PM
Lead	7.46	0.111	0.334		mg/Kg-dry	5	10/23/19 12:21 PM
Selenium	1.11	0.167	0.556		mg/Kg-dry	5	10/23/19 12:21 PM
Silver	<0.111	0.111	0.222		mg/Kg-dry	5	10/23/19 12:21 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0829	0.0183	0.0458		mg/Kg-dry	1	10/25/19 11:58 AM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0634	0.0634	0.317		mg/Kg-dry	50	10/18/19 04:24 PM
Ethylbenzene	<0.0634	0.0634	0.317		mg/Kg-dry	50	10/18/19 04:24 PM
Toluene	<0.0634	0.0634	0.317		mg/Kg-dry	50	10/18/19 04:24 PM
Xylenes, Total	<0.0634	0.0634	0.317		mg/Kg-dry	50	10/18/19 04:24 PM
Surr: 1,2-Dichloroethane-d4	100	0	52-149		%REC	50	10/18/19 04:24 PM
Surr: 4-Bromofluorobenzene	95.2	0	84-118		%REC	50	10/18/19 04:24 PM
Surr: Dibromofluoromethane	99.6	0	65-135		%REC	50	10/18/19 04:24 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-11, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-18
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:12 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	96.9	0	84-116		%REC	50	10/18/19 04:24 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	21.1	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-12, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-19
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:12 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0632	0.0632	0.126		mg/Kg-dry	1	10/17/19 08:01 PM
Aroclor 1221	<0.0632	0.0632	0.126		mg/Kg-dry	1	10/17/19 08:01 PM
Aroclor 1232	<0.0632	0.0632	0.126		mg/Kg-dry	1	10/17/19 08:01 PM
Aroclor 1242	<0.0632	0.0632	0.126		mg/Kg-dry	1	10/17/19 08:01 PM
Aroclor 1248	<0.0632	0.0632	0.126		mg/Kg-dry	1	10/17/19 08:01 PM
Aroclor 1254	0.0845	0.0632	0.126	J	mg/Kg-dry	1	10/17/19 08:01 PM
Aroclor 1260	<0.0632	0.0632	0.126		mg/Kg-dry	1	10/17/19 08:01 PM
Total PCBs	0.0845	0.0632	0.126	J	mg/Kg-dry	1	10/17/19 08:01 PM
Surr: Decachlorobiphenyl	85.0	0	58-125		%REC	1	10/17/19 08:01 PM
Surr: Tetrachloro-m-xylene	86.6	0	40-130		%REC	1	10/17/19 08:01 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	13200	382	1270		mg/Kg-dry	100	10/28/19 03:45 PM
TPH-ORO >C28-C35	4870	382	1270		mg/Kg-dry	100	10/28/19 03:45 PM
Surr: Isopropylbenzene	118	0	47-142		%REC	100	10/28/19 03:45 PM
Surr: Octacosane	4460	0	25-162	S	%REC	100	10/28/19 03:45 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	103	2.59	5.18		mg/Kg-dry	20	10/21/19 02:18 PM
Surr: Tetrachlorethene	107	0	70-134		%REC	20	10/21/19 02:18 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.79	0.563	1.13		mg/Kg-dry	5	10/23/19 12:23 PM
Barium	207	0.563	2.25		mg/Kg-dry	5	10/23/19 12:23 PM
Cadmium	0.174	0.113	0.338	J	mg/Kg-dry	5	10/23/19 12:23 PM
Chromium	16.0	0.563	2.25		mg/Kg-dry	5	10/23/19 12:23 PM
Lead	26.1	0.113	0.338		mg/Kg-dry	5	10/23/19 12:23 PM
Selenium	1.29	0.169	0.563		mg/Kg-dry	5	10/23/19 12:23 PM
Silver	<0.113	0.113	0.225		mg/Kg-dry	5	10/23/19 12:23 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0285	0.0191	0.0476	J	mg/Kg-dry	1	10/25/19 12:00 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	0.165	0.0647	0.323	J	mg/Kg-dry	50	10/18/19 04:55 PM
Ethylbenzene	0.472	0.0647	0.323		mg/Kg-dry	50	10/18/19 04:55 PM
Toluene	<0.0647	0.0647	0.323		mg/Kg-dry	50	10/18/19 04:55 PM
Xylenes, Total	<0.0647	0.0647	0.323		mg/Kg-dry	50	10/18/19 04:55 PM
Surr: 1,2-Dichloroethane-d4	100	0	52-149		%REC	50	10/18/19 04:55 PM
Surr: 4-Bromofluorobenzene	106	0	84-118		%REC	50	10/18/19 04:55 PM
Surr: Dibromofluoromethane	101	0	65-135		%REC	50	10/18/19 04:55 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-12, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-19
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:12 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	99.0	0	84-116		%REC	50	10/18/19 04:55 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	22.7	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-12, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-20
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:13 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0591	0.0591	0.118		mg/Kg-dry	1	10/17/19 08:26 PM
Aroclor 1221	<0.0591	0.0591	0.118		mg/Kg-dry	1	10/17/19 08:26 PM
Aroclor 1232	<0.0591	0.0591	0.118		mg/Kg-dry	1	10/17/19 08:26 PM
Aroclor 1242	<0.0591	0.0591	0.118		mg/Kg-dry	1	10/17/19 08:26 PM
Aroclor 1248	<0.0591	0.0591	0.118		mg/Kg-dry	1	10/17/19 08:26 PM
Aroclor 1254	0.163	0.0591	0.118		mg/Kg-dry	1	10/17/19 08:26 PM
Aroclor 1260	<0.0591	0.0591	0.118		mg/Kg-dry	1	10/17/19 08:26 PM
Total PCBs	0.163	0.0591	0.118		mg/Kg-dry	1	10/17/19 08:26 PM
Surr: Decachlorobiphenyl	82.1	0	58-125		%REC	1	10/17/19 08:26 PM
Surr: Tetrachloro-m-xylene	80.1	0	40-130		%REC	1	10/17/19 08:26 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	15200	357	1190		mg/Kg-dry	100	10/28/19 04:03 PM
TPH-ORO >C28-C35	9550	357	1190		mg/Kg-dry	100	10/28/19 04:03 PM
Surr: Isopropylbenzene	117	0	47-142		%REC	100	10/28/19 04:03 PM
Surr: Octacosane	3130	0	25-162	S	%REC	100	10/28/19 04:03 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	26.5	2.51	5.02		mg/Kg-dry	20	10/21/19 06:21 PM
Surr: Tetrachlorethene	92.3	0	70-134		%REC	20	10/21/19 06:21 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	3.18	0.575	1.15		mg/Kg-dry	5	10/23/19 12:25 PM
Barium	110	0.575	2.30		mg/Kg-dry	5	10/23/19 12:25 PM
Cadmium	<0.115	0.115	0.345		mg/Kg-dry	5	10/23/19 12:25 PM
Chromium	15.5	0.575	2.30		mg/Kg-dry	5	10/23/19 12:25 PM
Lead	13.5	0.115	0.345		mg/Kg-dry	5	10/23/19 12:25 PM
Selenium	1.14	0.173	0.575		mg/Kg-dry	5	10/23/19 12:25 PM
Silver	<0.115	0.115	0.230		mg/Kg-dry	5	10/23/19 12:25 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0554	0.0184	0.0460		mg/Kg-dry	1	10/25/19 12:03 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0627	0.0627	0.313		mg/Kg-dry	50	10/18/19 05:27 PM
Ethylbenzene	<0.0627	0.0627	0.313		mg/Kg-dry	50	10/18/19 05:27 PM
Toluene	<0.0627	0.0627	0.313		mg/Kg-dry	50	10/18/19 05:27 PM
Xylenes, Total	<0.0627	0.0627	0.313		mg/Kg-dry	50	10/18/19 05:27 PM
Surr: 1,2-Dichloroethane-d4	99.5	0	52-149		%REC	50	10/18/19 05:27 PM
Surr: 4-Bromofluorobenzene	101	0	84-118		%REC	50	10/18/19 05:27 PM
Surr: Dibromofluoromethane	98.5	0	65-135		%REC	50	10/18/19 05:27 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-12, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-20
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:13 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	96.5	0	84-116		%REC	50	10/18/19 05:27 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	20.2	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-13, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-21
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:27 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0573	0.0573	0.115		mg/Kg-dry	1	10/24/19 04:09 PM
Aroclor 1221	<0.0573	0.0573	0.115		mg/Kg-dry	1	10/24/19 04:09 PM
Aroclor 1232	<0.0573	0.0573	0.115		mg/Kg-dry	1	10/24/19 04:09 PM
Aroclor 1242	<0.0573	0.0573	0.115		mg/Kg-dry	1	10/24/19 04:09 PM
Aroclor 1248	<0.0573	0.0573	0.115		mg/Kg-dry	1	10/24/19 04:09 PM
Aroclor 1254	<0.0573	0.0573	0.115		mg/Kg-dry	1	10/24/19 04:09 PM
Aroclor 1260	<0.0573	0.0573	0.115		mg/Kg-dry	1	10/24/19 04:09 PM
Total PCBs	<0.0573	0.0573	0.115		mg/Kg-dry	1	10/24/19 04:09 PM
Surr: Decachlorobiphenyl	42.5	0	58-125	S	%REC	1	10/24/19 04:09 PM
Surr: Tetrachloro-m-xylene	52.9	0	40-130		%REC	1	10/24/19 04:09 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	4690	650	2170		mg/Kg-dry	200	10/28/19 04:21 PM
TPH-ORO >C28-C35	19900	650	2170		mg/Kg-dry	200	10/28/19 04:21 PM
Surr: Isopropylbenzene	63.9	0	47-142		%REC	200	10/28/19 04:21 PM
Surr: Octacosane	5670	0	25-162	S	%REC	200	10/28/19 04:21 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.34	2.34	4.68		mg/Kg-dry	20	10/21/19 03:06 PM
Surr: Tetrachlorethene	114	0	70-134		%REC	20	10/21/19 03:06 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	6.45	0.487	0.974		mg/Kg-dry	5	10/23/19 12:27 PM
Barium	193	0.487	1.95		mg/Kg-dry	5	10/23/19 12:27 PM
Cadmium	1.40	0.0974	0.292		mg/Kg-dry	5	10/23/19 12:27 PM
Chromium	363	0.487	1.95		mg/Kg-dry	5	10/23/19 12:27 PM
Lead	48.3	0.0974	0.292		mg/Kg-dry	5	10/23/19 12:27 PM
Selenium	1.61	0.146	0.487		mg/Kg-dry	5	10/23/19 12:27 PM
Silver	<0.0974	0.0974	0.195		mg/Kg-dry	5	10/23/19 12:27 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	1.77	0.173	0.433		mg/Kg-dry	10	10/25/19 12:56 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0585	0.0585	0.292		mg/Kg-dry	50	10/18/19 05:58 PM
Ethylbenzene	<0.0585	0.0585	0.292		mg/Kg-dry	50	10/18/19 05:58 PM
Toluene	<0.0585	0.0585	0.292		mg/Kg-dry	50	10/18/19 05:58 PM
Xylenes, Total	<0.0585	0.0585	0.292		mg/Kg-dry	50	10/18/19 05:58 PM
Surr: 1,2-Dichloroethane-d4	101	0	52-149		%REC	50	10/18/19 05:58 PM
Surr: 4-Bromofluorobenzene	94.9	0	84-118		%REC	50	10/18/19 05:58 PM
Surr: Dibromofluoromethane	100	0	65-135		%REC	50	10/18/19 05:58 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-13, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-21
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:27 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	95.5	0	84-116		%REC	50	10/18/19 05:58 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	14.5	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-13, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-22
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:30 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0580	0.0580	0.116		mg/Kg-dry	1	10/24/19 03:37 PM
Aroclor 1221	<0.0580	0.0580	0.116		mg/Kg-dry	1	10/24/19 03:37 PM
Aroclor 1232	<0.0580	0.0580	0.116		mg/Kg-dry	1	10/24/19 03:37 PM
Aroclor 1242	<0.0580	0.0580	0.116		mg/Kg-dry	1	10/24/19 03:37 PM
Aroclor 1248	<0.0580	0.0580	0.116		mg/Kg-dry	1	10/24/19 03:37 PM
Aroclor 1254	<0.0580	0.0580	0.116		mg/Kg-dry	1	10/24/19 03:37 PM
Aroclor 1260	<0.0580	0.0580	0.116		mg/Kg-dry	1	10/24/19 03:37 PM
Total PCBs	<0.0580	0.0580	0.116		mg/Kg-dry	1	10/24/19 03:37 PM
Surr: Decachlorobiphenyl	42.1	0	58-125	S	%REC	1	10/24/19 03:37 PM
Surr: Tetrachloro-m-xylene	55.6	0	40-130		%REC	1	10/24/19 03:37 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	3370	345	1150		mg/Kg-dry	100	10/28/19 04:39 PM
TPH-ORO >C28-C35	14100	345	1150		mg/Kg-dry	100	10/28/19 04:39 PM
Surr: Isopropylbenzene	61.8	0	47-142		%REC	100	10/28/19 04:39 PM
Surr: Octacosane	4120	0	25-162	S	%REC	100	10/28/19 04:39 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.36	2.36	4.72		mg/Kg-dry	20	10/21/19 03:31 PM
Surr: Tetrachlorethene	119	0	70-134		%REC	20	10/21/19 03:31 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	4.45	0.541	1.08		mg/Kg-dry	5	10/23/19 01:00 PM
Barium	143	0.541	2.16		mg/Kg-dry	5	10/23/19 01:00 PM
Cadmium	1.30	0.108	0.325		mg/Kg-dry	5	10/23/19 01:00 PM
Chromium	151	0.541	2.16		mg/Kg-dry	5	10/23/19 01:00 PM
Lead	96.1	0.108	0.325		mg/Kg-dry	5	10/23/19 01:00 PM
Selenium	1.23	0.162	0.541		mg/Kg-dry	5	10/23/19 01:00 PM
Silver	<0.108	0.108	0.216		mg/Kg-dry	5	10/23/19 01:00 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	3.03	0.174	0.434		mg/Kg-dry	10	10/25/19 12:58 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0590	0.0590	0.295		mg/Kg-dry	50	10/18/19 06:29 PM
Ethylbenzene	<0.0590	0.0590	0.295		mg/Kg-dry	50	10/18/19 06:29 PM
Toluene	<0.0590	0.0590	0.295		mg/Kg-dry	50	10/18/19 06:29 PM
Xylenes, Total	<0.0590	0.0590	0.295		mg/Kg-dry	50	10/18/19 06:29 PM
Surr: 1,2-Dichloroethane-d4	99.5	0	52-149		%REC	50	10/18/19 06:29 PM
Surr: 4-Bromofluorobenzene	93.4	0	84-118		%REC	50	10/18/19 06:29 PM
Surr: Dibromofluoromethane	101	0	65-135		%REC	50	10/18/19 06:29 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-13, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-22
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:30 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	95.9	0	84-116		%REC	50	10/18/19 06:29 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.2	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-14, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-23
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:35 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0613	0.0613	0.123		mg/Kg-dry	1	10/21/19 12:35 PM
Aroclor 1221	<0.0613	0.0613	0.123		mg/Kg-dry	1	10/21/19 12:35 PM
Aroclor 1232	<0.0613	0.0613	0.123		mg/Kg-dry	1	10/21/19 12:35 PM
Aroclor 1242	<0.0613	0.0613	0.123		mg/Kg-dry	1	10/21/19 12:35 PM
Aroclor 1248	<0.0613	0.0613	0.123		mg/Kg-dry	1	10/21/19 12:35 PM
Aroclor 1254	<0.0613	0.0613	0.123		mg/Kg-dry	1	10/21/19 12:35 PM
Aroclor 1260	<0.0613	0.0613	0.123		mg/Kg-dry	1	10/21/19 12:35 PM
Total PCBs	<0.0613	0.0613	0.123		mg/Kg-dry	1	10/21/19 12:35 PM
Surr: Decachlorobiphenyl	61.2	0	58-125		%REC	1	10/21/19 12:35 PM
Surr: Tetrachloro-m-xylene	66.2	0	40-130		%REC	1	10/21/19 12:35 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	2500	73.7	246		mg/Kg-dry	20	10/28/19 04:57 PM
TPH-ORO >C28-C35	855	73.7	246		mg/Kg-dry	20	10/28/19 04:57 PM
Surr: Isopropylbenzene	105	0	47-142		%REC	20	10/28/19 04:57 PM
Surr: Octacosane	1000	0	25-162	S	%REC	20	10/28/19 04:57 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	74.6	2.51	5.02		mg/Kg-dry	20	10/21/19 03:55 PM
Surr: Tetrachlorethene	133	0	70-134		%REC	20	10/21/19 03:55 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	5.87	0.551	1.10		mg/Kg-dry	5	10/23/19 01:02 PM
Barium	86.9	0.551	2.20		mg/Kg-dry	5	10/23/19 01:02 PM
Cadmium	0.181	0.110	0.331	J	mg/Kg-dry	5	10/23/19 01:02 PM
Chromium	27.1	0.551	2.20		mg/Kg-dry	5	10/23/19 01:02 PM
Lead	7.48	0.110	0.331		mg/Kg-dry	5	10/23/19 01:02 PM
Selenium	1.48	0.165	0.551		mg/Kg-dry	5	10/23/19 01:02 PM
Silver	<0.110	0.110	0.220		mg/Kg-dry	5	10/23/19 01:02 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.140	0.0168	0.0420		mg/Kg-dry	1	10/25/19 12:32 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0628	0.0628	0.314		mg/Kg-dry	50	10/18/19 07:00 PM
Ethylbenzene	<0.0628	0.0628	0.314		mg/Kg-dry	50	10/18/19 07:00 PM
Toluene	<0.0628	0.0628	0.314		mg/Kg-dry	50	10/18/19 07:00 PM
Xylenes, Total	<0.0628	0.0628	0.314		mg/Kg-dry	50	10/18/19 07:00 PM
Surr: 1,2-Dichloroethane-d4	99.6	0	52-149		%REC	50	10/18/19 07:00 PM
Surr: 4-Bromofluorobenzene	93.6	0	84-118		%REC	50	10/18/19 07:00 PM
Surr: Dibromofluoromethane	99.9	0	65-135		%REC	50	10/18/19 07:00 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-14, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-23
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:35 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	96.0	0	84-116		%REC	50	10/18/19 07:00 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	20.4	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-14, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-24
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:38 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/21/19 01:00 PM
Aroclor 1221	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/21/19 01:00 PM
Aroclor 1232	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/21/19 01:00 PM
Aroclor 1242	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/21/19 01:00 PM
Aroclor 1248	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/21/19 01:00 PM
Aroclor 1254	0.0916	0.0590	0.118	J	mg/Kg-dry	1	10/21/19 01:00 PM
Aroclor 1260	<0.0590	0.0590	0.118		mg/Kg-dry	1	10/21/19 01:00 PM
Total PCBs	0.0916	0.0590	0.118	J	mg/Kg-dry	1	10/21/19 01:00 PM
Surr: Decachlorobiphenyl	60.8	0	58-125		%REC	1	10/21/19 01:00 PM
Surr: Tetrachloro-m-xylene	65.2	0	40-130		%REC	1	10/21/19 01:00 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	1200	35.1	117		mg/Kg-dry	10	10/28/19 01:07 PM
TPH-ORO >C28-C35	1140	35.1	117		mg/Kg-dry	10	10/28/19 01:07 PM
Surr: Isopropylbenzene	71.9	0	47-142		%REC	10	10/28/19 01:07 PM
Surr: Octacosane	765	0	25-162	S	%REC	10	10/28/19 01:07 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	3.42	2.48	4.96	J	mg/Kg-dry	20	10/21/19 07:58 PM
Surr: Tetrachlorethene	108	0	70-134		%REC	20	10/21/19 07:58 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	6.21	0.544	1.09		mg/Kg-dry	5	10/23/19 01:04 PM
Barium	176	0.544	2.18		mg/Kg-dry	5	10/23/19 01:04 PM
Cadmium	0.841	0.109	0.326		mg/Kg-dry	5	10/23/19 01:04 PM
Chromium	163	0.544	2.18		mg/Kg-dry	5	10/23/19 01:04 PM
Lead	29.2	0.109	0.326		mg/Kg-dry	5	10/23/19 01:04 PM
Selenium	2.19	0.163	0.544		mg/Kg-dry	5	10/23/19 01:04 PM
Silver	<0.109	0.109	0.218		mg/Kg-dry	5	10/23/19 01:04 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.238	0.0188	0.0471		mg/Kg-dry	1	10/25/19 12:34 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0620	0.0620	0.310		mg/Kg-dry	50	10/18/19 07:32 PM
Ethylbenzene	<0.0620	0.0620	0.310		mg/Kg-dry	50	10/18/19 07:32 PM
Toluene	<0.0620	0.0620	0.310		mg/Kg-dry	50	10/18/19 07:32 PM
Xylenes, Total	<0.0620	0.0620	0.310		mg/Kg-dry	50	10/18/19 07:32 PM
Surr: 1,2-Dichloroethane-d4	98.8	0	52-149		%REC	50	10/18/19 07:32 PM
Surr: 4-Bromofluorobenzene	102	0	84-118		%REC	50	10/18/19 07:32 PM
Surr: Dibromofluoromethane	100	0	65-135		%REC	50	10/18/19 07:32 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-14, 1.0'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-24
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:38 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	96.4	0	84-116		%REC	50	10/18/19 07:32 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	19.4	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-15, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-25
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:45 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0625	0.0625	0.125		mg/Kg-dry	1	10/21/19 01:25 PM
Aroclor 1221	<0.0625	0.0625	0.125		mg/Kg-dry	1	10/21/19 01:25 PM
Aroclor 1232	<0.0625	0.0625	0.125		mg/Kg-dry	1	10/21/19 01:25 PM
Aroclor 1242	<0.0625	0.0625	0.125		mg/Kg-dry	1	10/21/19 01:25 PM
Aroclor 1248	<0.0625	0.0625	0.125		mg/Kg-dry	1	10/21/19 01:25 PM
Aroclor 1254	<0.0625	0.0625	0.125		mg/Kg-dry	1	10/21/19 01:25 PM
Aroclor 1260	<0.0625	0.0625	0.125		mg/Kg-dry	1	10/21/19 01:25 PM
Total PCBs	<0.0625	0.0625	0.125		mg/Kg-dry	1	10/21/19 01:25 PM
Surr: Decachlorobiphenyl	60.1	0	58-125		%REC	1	10/21/19 01:25 PM
Surr: Tetrachloro-m-xylene	63.5	0	40-130		%REC	1	10/21/19 01:25 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	3760	75.1	250		mg/Kg-dry	20	10/28/19 05:24 PM
TPH-ORO >C28-C35	608	75.1	250		mg/Kg-dry	20	10/28/19 05:24 PM
Surr: Isopropylbenzene	121	0	47-142		%REC	20	10/28/19 05:24 PM
Surr: Octacosane	827	0	25-162	S	%REC	20	10/28/19 05:24 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	60.8	2.60	5.20		mg/Kg-dry	20	10/21/19 04:43 PM
Surr: Tetrachlorethene	123	0	70-134		%REC	20	10/21/19 04:43 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	5.51	0.590	1.18		mg/Kg-dry	5	10/23/19 01:06 PM
Barium	65.8	0.590	2.36		mg/Kg-dry	5	10/23/19 01:06 PM
Cadmium	<0.118	0.118	0.354		mg/Kg-dry	5	10/23/19 01:06 PM
Chromium	29.5	0.590	2.36		mg/Kg-dry	5	10/23/19 01:06 PM
Lead	3.56	0.118	0.354		mg/Kg-dry	5	10/23/19 01:06 PM
Selenium	1.51	0.177	0.590		mg/Kg-dry	5	10/23/19 01:06 PM
Silver	<0.118	0.118	0.236		mg/Kg-dry	5	10/23/19 01:06 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0196	0.0186	0.0464	J	mg/Kg-dry	1	10/25/19 12:36 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	0.175	0.0649	0.325	J	mg/Kg-dry	50	10/18/19 08:03 PM
Ethylbenzene	<0.0649	0.0649	0.325		mg/Kg-dry	50	10/18/19 08:03 PM
Toluene	<0.0649	0.0649	0.325		mg/Kg-dry	50	10/18/19 08:03 PM
Xylenes, Total	<0.0649	0.0649	0.325		mg/Kg-dry	50	10/18/19 08:03 PM
Surr: 1,2-Dichloroethane-d4	101	0	52-149		%REC	50	10/18/19 08:03 PM
Surr: 4-Bromofluorobenzene	106	0	84-118		%REC	50	10/18/19 08:03 PM
Surr: Dibromofluoromethane	101	0	65-135		%REC	50	10/18/19 08:03 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-15, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-25
Project No:	6-0141-12	**Collection Date:**	10/14/19 09:45 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	98.4	0	84-116		%REC	50	10/18/19 08:03 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	23.0	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-16, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-26
Project No:	6-0141-12	**Collection Date:**	10/14/19 10:25 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	0.117	0.0563	0.113		mg/Kg-dry	1	10/21/19 01:51 PM
Aroclor 1221	<0.0563	0.0563	0.113		mg/Kg-dry	1	10/21/19 01:51 PM
Aroclor 1232	<0.0563	0.0563	0.113		mg/Kg-dry	1	10/21/19 01:51 PM
Aroclor 1242	<0.0563	0.0563	0.113		mg/Kg-dry	1	10/21/19 01:51 PM
Aroclor 1248	<0.0563	0.0563	0.113		mg/Kg-dry	1	10/21/19 01:51 PM
Aroclor 1254	0.0599	0.0563	0.113	J	mg/Kg-dry	1	10/21/19 01:51 PM
Aroclor 1260	<0.0563	0.0563	0.113		mg/Kg-dry	1	10/21/19 01:51 PM
Total PCBs	0.177	0.0563	0.113		mg/Kg-dry	1	10/21/19 01:51 PM
Surr: Decachlorobiphenyl	84.0	0	58-125		%REC	1	10/21/19 01:51 PM
Surr: Tetrachloro-m-xylene	86.6	0	40-130		%REC	1	10/21/19 01:51 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	2390	67.2	224		mg/Kg-dry	20	10/28/19 05:43 PM
TPH-ORO >C28-C35	1270	67.2	224		mg/Kg-dry	20	10/28/19 05:43 PM
Surr: Isopropylbenzene	121	0	47-142		%REC	20	10/28/19 05:43 PM
Surr: Octacosane	759	0	25-162	S	%REC	20	10/28/19 05:43 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	<2.30	2.30	4.61		mg/Kg-dry	20	10/21/19 08:23 PM
Surr: Tetrachlorethene	109	0	70-134		%REC	20	10/21/19 08:23 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	13.8	0.570	1.14		mg/Kg-dry	5	10/23/19 01:08 PM
Barium	92.9	0.570	2.28		mg/Kg-dry	5	10/23/19 01:08 PM
Cadmium	0.293	0.114	0.342	J	mg/Kg-dry	5	10/23/19 01:08 PM
Chromium	31.3	0.570	2.28		mg/Kg-dry	5	10/23/19 01:08 PM
Lead	20.7	0.114	0.342		mg/Kg-dry	5	10/23/19 01:08 PM
Selenium	1.06	0.171	0.570		mg/Kg-dry	5	10/23/19 01:08 PM
Silver	<0.114	0.114	0.228		mg/Kg-dry	5	10/23/19 01:08 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.106	0.0162	0.0404		mg/Kg-dry	1	10/25/19 12:39 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0576	0.0576	0.288		mg/Kg-dry	50	10/18/19 08:34 PM
Ethylbenzene	<0.0576	0.0576	0.288		mg/Kg-dry	50	10/18/19 08:34 PM
Toluene	<0.0576	0.0576	0.288		mg/Kg-dry	50	10/18/19 08:34 PM
Xylenes, Total	<0.0576	0.0576	0.288		mg/Kg-dry	50	10/18/19 08:34 PM
Surr: 1,2-Dichloroethane-d4	100	0	52-149		%REC	50	10/18/19 08:34 PM
Surr: 4-Bromofluorobenzene	94.6	0	84-118		%REC	50	10/18/19 08:34 PM
Surr: Dibromofluoromethane	98.9	0	65-135		%REC	50	10/18/19 08:34 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-16, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-26
Project No:	6-0141-12	**Collection Date:**	10/14/19 10:25 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	97.2	0	84-116		%REC	50	10/18/19 08:34 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	13.2	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-17, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-27
Project No:	6-0141-12	**Collection Date:**	10/14/19 10:25 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
PCB BY GC - SOIL/SOLID		**SW8082A**					Analyst: **LG**
Aroclor 1016	<0.0565	0.0565	0.113		mg/Kg-dry	1	10/21/19 02:16 PM
Aroclor 1221	<0.0565	0.0565	0.113		mg/Kg-dry	1	10/21/19 02:16 PM
Aroclor 1232	<0.0565	0.0565	0.113		mg/Kg-dry	1	10/21/19 02:16 PM
Aroclor 1242	<0.0565	0.0565	0.113		mg/Kg-dry	1	10/21/19 02:16 PM
Aroclor 1248	<0.0565	0.0565	0.113		mg/Kg-dry	1	10/21/19 02:16 PM
Aroclor 1254	0.0682	0.0565	0.113	J	mg/Kg-dry	1	10/21/19 02:16 PM
Aroclor 1260	<0.0565	0.0565	0.113		mg/Kg-dry	1	10/21/19 02:16 PM
Total PCBs	0.0682	0.0565	0.113	J	mg/Kg-dry	1	10/21/19 02:16 PM
Surr: Decachlorobiphenyl	87.7	0	58-125		%REC	1	10/21/19 02:16 PM
Surr: Tetrachloro-m-xylene	102	0	40-130		%REC	1	10/21/19 02:16 PM
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	513	32.8	109		mg/Kg-dry	10	10/28/19 02:02 PM
TPH-ORO >C28-C35	562	32.8	109		mg/Kg-dry	10	10/28/19 02:02 PM
Surr: Isopropylbenzene	93.2	0	47-142		%REC	10	10/28/19 02:02 PM
Surr: Octacosane	560	0	25-162	S	%REC	10	10/28/19 02:02 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	2.94	2.37	4.75	J	mg/Kg-dry	20	10/21/19 05:56 PM
Surr: Tetrachlorethene	95.2	0	70-134		%REC	20	10/21/19 05:56 PM
TRACE METALS: ICP-MS - SOLID		**SW6020A**					Analyst: **SP**
Arsenic	2.74	0.560	1.12		mg/Kg-dry	5	10/23/19 01:10 PM
Barium	85.5	0.560	2.24		mg/Kg-dry	5	10/23/19 01:10 PM
Cadmium	0.377	0.112	0.336		mg/Kg-dry	5	10/23/19 01:10 PM
Chromium	19.5	0.560	2.24		mg/Kg-dry	5	10/23/19 01:10 PM
Lead	17.1	0.112	0.336		mg/Kg-dry	5	10/23/19 01:10 PM
Selenium	0.773	0.168	0.560		mg/Kg-dry	5	10/23/19 01:10 PM
Silver	<0.112	0.112	0.224		mg/Kg-dry	5	10/23/19 01:10 PM
TOTAL MERCURY: SOIL/SOLID		**SW7471B**					Analyst: **AH**
Mercury	0.0647	0.0171	0.0428		mg/Kg-dry	1	10/25/19 12:41 PM
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Benzene	<0.0594	0.0594	0.297		mg/Kg-dry	50	10/18/19 09:05 PM
Ethylbenzene	<0.0594	0.0594	0.297		mg/Kg-dry	50	10/18/19 09:05 PM
Toluene	<0.0594	0.0594	0.297		mg/Kg-dry	50	10/18/19 09:05 PM
Xylenes, Total	<0.0594	0.0594	0.297		mg/Kg-dry	50	10/18/19 09:05 PM
Surr: 1,2-Dichloroethane-d4	100	0	52-149		%REC	50	10/18/19 09:05 PM
Surr: 4-Bromofluorobenzene	96.3	0	84-118		%REC	50	10/18/19 09:05 PM
Surr: Dibromofluoromethane	101	0	65-135		%REC	50	10/18/19 09:05 PM

Qualifiers:

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

DHL Analytical, Inc.

Date: *29-Oct-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	C-17, 0.5'
Project:	Empire ABO/Clark Bldg	**Lab ID:**	1910147-27
Project No:	6-0141-12	**Collection Date:**	10/14/19 10:25 AM
Lab Order:	1910147	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
VOLATILES BY 8260/5035 GC/MS		**SW8260C**					Analyst: **CC**
Surr: Toluene-d8	95.0	0	84-116		%REC	50	10/18/19 09:05 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.8	0	0		WT%	1	10/24/19 08:37 AM

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

DHL Analytical, Inc. **Date:** *29-Oct-19*

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_191025A

The QC data in batch 93386 applies to the following samples: 1910147-01C, 1910147-02C, 1910147-03C, 1910147-04C, 1910147-05C, 1910147-06C, 1910147-07C, 1910147-08C, 1910147-09C, 1910147-10C, 1910147-11C, 1910147-12C, 1910147-13C, 1910147-14C, 1910147-15C

Sample ID: **MB-93386** Batch ID: **93386** TestNo: **M8015D** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC15_191025A** Analysis Date: **10/25/2019 12:08:58 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<3.00	10.0								
TPH-ORO >C28-C35	<3.00	10.0								
Surr: Isopropylbenzene	5.24		7.500		69.9	47	142			
Surr: Octacosane	7.01		7.500		93.4	25	162			

Sample ID: **LCS-93386** Batch ID: **93386** TestNo: **M8015D** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC15_191025A** Analysis Date: **10/25/2019 12:18:02 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	95.7	10.0	125.0	0	76.5	50	114			
Surr: Isopropylbenzene	6.58		7.500		87.8	47	142			
Surr: Octacosane	7.16		7.500		95.4	25	162			

Sample ID: **1910147-01CMSD** Batch ID: **93386** TestNo: **M8015D** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC15_191025A** Analysis Date: **10/25/2019 1:25:11 PM** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	126	10.4	129.6	12.01	87.6	50	114	11.9	30	
Surr: Isopropylbenzene	9.88		7.776		127	47	142	0	0	
Surr: Octacosane	6.94		7.776		89.3	25	162	0	0	

Sample ID: **1910147-01CMS** Batch ID: **93386** TestNo: **M8015D** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC15_191025A** Analysis Date: **10/25/2019 1:34:52 PM** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	112	10.3	129.1	12.01	77.4	50	114			
Surr: Isopropylbenzene	7.46		7.745		96.3	47	142			
Surr: Octacosane	7.33		7.745		94.7	25	162			

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_191025A

Sample ID: **ICV-191025**	Batch ID: **R107108**	TestNo: **M8015D**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC15_191025A**	Analysis Date: **10/25/2019 10:15:38 A**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	408	10.0	500.0	0	81.6	80	120			
TPH-ORO >C28-C35	<3.00	10.0	0							
Surr: Isopropylbenzene	28.1		25.00		112	80	120			
Surr: Octacosane	22.3		25.00		89.3	80	120			

Sample ID: **CCV1-191025**	Batch ID: **R107108**	TestNo: **M8015D**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC15_191025A**	Analysis Date: **10/25/2019 5:04:59 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	216	10.0	250.0	0	86.6	80	120			
TPH-ORO >C28-C35	0.0104	10.0	0							
Surr: Isopropylbenzene	14.7		12.50		118	80	120			
Surr: Octacosane	12.1		12.50		96.9	80	120			

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_191028A

The QC data in batch 93401 applies to the following samples: 1910147-17C, 1910147-18C, 1910147-19C, 1910147-20C, 1910147-21C, 1910147-22C, 1910147-23C, 1910147-24C, 1910147-25C, 1910147-26C, 1910147-27C

Sample ID: **MB-93401** Batch ID: **93401** TestNo: **M8015D** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC15_191028A** Analysis Date: **10/28/2019 10:01:39 A** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<3.00	10.0								
TPH-ORO >C28-C35	<3.00	10.0								
Surr: Isopropylbenzene	7.36		7.500		98.2	47	142			
Surr: Octacosane	6.44		7.500		85.8	25	162			

Sample ID: **LCS-93401** Batch ID: **93401** TestNo: **M8015D** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC15_191028A** Analysis Date: **10/28/2019 10:10:42 A** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	116	10.0	125.0	0	93.1	50	114			
Surr: Isopropylbenzene	6.69		7.500		89.2	47	142			
Surr: Octacosane	6.64		7.500		88.5	25	162			

Sample ID: **1910147-17CMS** Batch ID: **93401** TestNo: **M8015D** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC15_191028A** Analysis Date: **10/28/2019 3:00:04 PM** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	726	118	147.5	767.5	-28.4	50	114			S
Surr: Isopropylbenzene	7.46		8.852		84.2	47	142			
Surr: Octacosane	68.7		8.852		776	25	162			S

Sample ID: **1910147-17CMSD** Batch ID: **93401** TestNo: **M8015D** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC15_191028A** Analysis Date: **10/28/2019 3:09:08 PM** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	995	119	148.7	767.5	153	50	114	31.4	30	SR
Surr: Isopropylbenzene	8.11		8.922		90.9	47	142	0	0	
Surr: Octacosane	79.1		8.922		886	25	162	0	0	S

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_191028A

Sample ID: **ICV-191028**	Batch ID: **R107133**	TestNo: **M8015D**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC15_191028A**	Analysis Date: **10/28/2019 9:42:11 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	440	10.0	500.0	0	88.0	80	120			
TPH-ORO >C28-C35	<3.00	10.0	0							
Surr: Isopropylbenzene	27.7		25.00		111	80	120			
Surr: Octacosane	21.3		25.00		85.3	80	120			

Sample ID: **CCV1-191028**	Batch ID: **R107133**	TestNo: **M8015D**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC15_191028A**	Analysis Date: **10/28/2019 6:01:13 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	218	10.0	250.0	0	87.1	80	120			
TPH-ORO >C28-C35	<3.00	10.0	0							
Surr: Isopropylbenzene	14.8		12.50		118	80	120			
Surr: Octacosane	11.2		12.50		89.7	80	120			

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_191017A

The QC data in batch 93252 applies to the following samples: 1910147-01C, 1910147-02C, 1910147-03C, 1910147-04C, 1910147-05C, 1910147-06C, 1910147-07C, 1910147-08C, 1910147-09C, 1910147-10C, 1910147-11C, 1910147-12C, 1910147-13C, 1910147-14C, 1910147-15C, 1910147-17C, 1910147-18C, 1910147-19C, 1910147-20C

Sample ID: **LCS-93252** Batch ID: **93252** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_191017A** Analysis Date: **10/17/2019 10:18:00 A** Prep Date: **10/16/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.987	0.100	1.000	0	98.7	41	138			
Aroclor 1260	0.998	0.100	1.000	0	99.8	61	131			
Surr: Decachlorobiphenyl	0.117		0.1000		117	58	125			
Surr: Tetrachloro-m-xylene	0.108		0.1000		108	40	130			

Sample ID: **MB-93252** Batch ID: **93252** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_191017A** Analysis Date: **10/17/2019 10:44:00 A** Prep Date: **10/16/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.110		0.1000		110	58	125			
Surr: Tetrachloro-m-xylene	0.0997		0.1000		99.7	40	130			

Sample ID: **1910147-02CMS** Batch ID: **93252** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC16_191017A** Analysis Date: **10/17/2019 3:22:00 PM** Prep Date: **10/16/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.986	0.105	1.047	0	94.2	41	138			
Aroclor 1260	0.867	0.105	1.047	0	82.8	61	131			
Surr: Decachlorobiphenyl	0.0861		0.1047		82.2	58	125			
Surr: Tetrachloro-m-xylene	0.103		0.1047		97.9	40	130			

Sample ID: **1910147-02CMSD** Batch ID: **93252** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC16_191017A** Analysis Date: **10/17/2019 3:47:00 PM** Prep Date: **10/16/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	0.986	0.105	1.051	0	93.8	41	138	0.017	50	
Aroclor 1260	0.834	0.105	1.051	0	79.3	61	131	3.95	50	
Surr: Decachlorobiphenyl	0.0720		0.1051		68.5	58	125	0		
Surr: Tetrachloro-m-xylene	0.104		0.1051		99.1	40	130	0		

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_191017A

Sample ID: **ICV-191017**	Batch ID: **R106943**	TestNo: **SW8082A**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC16_191017A**	Analysis Date: **10/17/2019 9:53:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	2.09	0.100	2.000	0	105	80	120			
Aroclor 1260	2.02	0.100	2.000	0	101	80	120			
Surr: Decachlorobiphenyl	0.206		0.2000		103	58	125			
Surr: Tetrachloro-m-xylene	0.208		0.2000		104	40	130			

Sample ID: **CCV-191017-2154**	Batch ID: **R106943**	TestNo: **SW8082A**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC16_191017A**	Analysis Date: **10/17/2019 4:13:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1221	1.07	0.100	1.000	0	107	80	120			
Aroclor 1254	0.978	0.100	1.000	0	97.8	80	120			
Surr: Decachlorobiphenyl	0.0865		0.1000		86.5	58	125			
Surr: Tetrachloro-m-xylene	0.106		0.1000		106	40	130			

Sample ID: **CCV-191017**	Batch ID: **R106943**	TestNo: **SW8082A**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC16_191017A**	Analysis Date: **10/17/2019 8:51:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.03	0.100	1.000	0	103	80	120			
Aroclor 1260	0.906	0.100	1.000	0	90.6	80	120			
Surr: Decachlorobiphenyl	0.0764		0.1000		76.4	58	125			
Surr: Tetrachloro-m-xylene	0.104		0.1000		104	40	130			

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_191021A

The QC data in batch 93252 applies to the following samples: 1910147-01C, 1910147-02C, 1910147-03C, 1910147-04C, 1910147-05C, 1910147-06C, 1910147-07C, 1910147-08C, 1910147-09C, 1910147-10C, 1910147-11C, 1910147-12C, 1910147-13C, 1910147-14C, 1910147-15C, 1910147-17C, 1910147-18C, 1910147-19C, 1910147-20C

Sample ID: **SB-191021** Batch ID: **93252** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **SBLK** Run ID: **GC16_191021A** Analysis Date: **10/21/2019 11:19:00 A** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1254	<0.0500	0.100	0							
Surr: Decachlorobiphenyl	7.29		0							
Surr: Tetrachloro-m-xylene	0.000317		0							

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_191021A

The QC data in batch 93295 applies to the following samples: 1910147-21C, 1910147-22C, 1910147-23C, 1910147-24C, 1910147-25C, 1910147-26C, 1910147-27C

Sample ID: **LCS-93295** Batch ID: **93295** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_191021A** Analysis Date: **10/21/2019 10:28:00 A** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.12	0.100	1.000	0	112	41	138			
Aroclor 1260	1.07	0.100	1.000	0	107	61	131			
Surr: Decachlorobiphenyl	0.114		0.1000		114	58	125			
Surr: Tetrachloro-m-xylene	0.122		0.1000		122	40	130			

Sample ID: **MB-93295** Batch ID: **93295** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_191021A** Analysis Date: **10/21/2019 10:53:00 A** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.103		0.1000		103	58	125			
Surr: Tetrachloro-m-xylene	0.101		0.1000		101	40	130			

Sample ID: **1910147-27CMS** Batch ID: **93295** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC16_191021A** Analysis Date: **10/21/2019 3:07:00 PM** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.08	0.115	1.153	0	94.0	41	138			
Aroclor 1260	0.980	0.115	1.153	0	85.1	61	131			
Surr: Decachlorobiphenyl	0.109		0.1153		94.7	58	125			
Surr: Tetrachloro-m-xylene	0.118		0.1153		102	40	130			

Sample ID: **1910147-27CMSD** Batch ID: **93295** TestNo: **SW8082A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC16_191021A** Analysis Date: **10/21/2019 3:32:00 PM** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.01	0.115	1.147	0	87.8	41	138	7.26	50	
Aroclor 1260	0.910	0.115	1.147	0	79.3	61	131	7.46	50	
Surr: Decachlorobiphenyl	0.0822		0.1147		71.7	58	125	0		
Surr: Tetrachloro-m-xylene	0.110		0.1147		96.0	40	130	0		

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_191021A

Sample ID: **ICV-191021**	Batch ID: **R106994**	TestNo: **SW8082A**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC16_191021A**	Analysis Date: **10/21/2019 9:54:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	2.20	0.100	2.000	0	110	80	120			
Aroclor 1260	2.07	0.100	2.000	0	104	80	120			
Total PCBs	4.28	0.100	0							
Surr: Decachlorobiphenyl	0.201		0.2000		101	58	125			
Surr: Tetrachloro-m-xylene	0.217		0.2000		108	40	130			

Sample ID: **CCV-191021-2154**	Batch ID: **R106994**	TestNo: **SW8082A**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC16_191021A**	Analysis Date: **10/21/2019 3:58:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1221	1.09	0.100	1.000	0	109	80	120			
Aroclor 1254	0.982	0.100	1.000	0	98.2	80	120			
Total PCBs	2.07	0.100	0							
Surr: Decachlorobiphenyl	0.0881		0.1000		88.1	58	125			
Surr: Tetrachloro-m-xylene	0.108		0.1000		108	40	130			

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_191024A

The QC data in batch 93295 applies to the following samples: 1910147-21C, 1910147-22C, 1910147-23C, 1910147-24C, 1910147-25C, 1910147-26C, 1910147-27C

Sample ID: **LCS-93295-CU** Batch ID: **93295** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC16_191024A** Analysis Date: **10/24/2019 2:46:00 PM** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	1.01	0.100	1.000	0	101	41	138			
Aroclor 1260	0.979	0.100	1.000	0	97.9	61	131			
Surr: Decachlorobiphenyl	0.105		0.1000		105	58	125			
Surr: Tetrachloro-m-xylene	0.108		0.1000		108	40	130			

Sample ID: **MB-93295-CU** Batch ID: **93295** TestNo: **SW8082A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC16_191024A** Analysis Date: **10/24/2019 3:12:00 PM** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	<0.0500	0.100								
Aroclor 1221	<0.0500	0.100								
Aroclor 1232	<0.0500	0.100								
Aroclor 1242	<0.0500	0.100								
Aroclor 1248	<0.0500	0.100								
Aroclor 1254	<0.0500	0.100								
Aroclor 1260	<0.0500	0.100								
Total PCBs	<0.0500	0.100								
Surr: Decachlorobiphenyl	0.0897		0.1000		89.7	58	125			
Surr: Tetrachloro-m-xylene	0.0908		0.1000		90.8	40	130			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC16_191024A

Sample ID: **ICV-191024**	Batch ID: **R107102**	TestNo: **SW8082A**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC16_191024A**	Analysis Date: **10/24/2019 2:21:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1016	2.18	0.100	2.000	0	109	80	120			
Aroclor 1260	2.05	0.100	2.000	0	103	80	120			
Total PCBs	4.23	0.100	0							
Surr: Decachlorobiphenyl	0.193		0.2000		96.3	58	125			
Surr: Tetrachloro-m-xylene	0.214		0.2000		107	40	130			

Sample ID: **CCV-191024**	Batch ID: **R107102**	TestNo: **SW8082A**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC16_191024A**	Analysis Date: **10/24/2019 4:40:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Aroclor 1221	0.946	0.100	1.000	0	94.6	80	120			
Aroclor 1254	0.934	0.100	1.000	0	93.4	80	120			
Total PCBs	1.88	0.100	0							
Surr: Decachlorobiphenyl	0.0850		0.1000		85.0	58	125			
Surr: Tetrachloro-m-xylene	0.102		0.1000		102	40	130			

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_191017A

The QC data in batch 93268 applies to the following samples: 1910147-01B, 1910147-02B, 1910147-03B, 1910147-04B, 1910147-05B, 1910147-06B, 1910147-07B, 1910147-08B, 1910147-09B, 1910147-10B, 1910147-11B, 1910147-12B, 1910147-13B, 1910147-14B, 1910147-15B

Sample ID: **LCS-93268 MEOH** Batch ID: **93268** TestNo: **M8015V** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC4_191017A** Analysis Date: **10/17/2019 10:55:24 A** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.81	0.200	2.500	0	112	68	126			
Surr: Tetrachlorethene	0.463		0.4000		116	70	134			

Sample ID: **LCSD-93268 MEOH** Batch ID: **93268** TestNo: **M8015V** Units: **mg/Kg**
SampType: **LCSD** Run ID: **GC4_191017A** Analysis Date: **10/17/2019 11:19:38 A** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.84	0.200	2.500	0	114	68	126			
Surr: Tetrachlorethene	0.465		0.4000		116	70	134			

Sample ID: **MB-93268 MEOH** Batch ID: **93268** TestNo: **M8015V** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC4_191017A** Analysis Date: **10/17/2019 12:32:07 P** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.100	0.200								
Surr: Tetrachlorethene	0.515		0.4000		129	70	134			

Sample ID: **1910147-01BMS** Batch ID: **93268** TestNo: **M8015V** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC4_191017A** Analysis Date: **10/17/2019 2:56:58 PM** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	44.6	4.19	52.36	0	85.1	68	126			
Surr: Tetrachlorethene	9.07		8.378		108	70	134			

Sample ID: **1910147-01BMSD** Batch ID: **93268** TestNo: **M8015V** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC4_191017A** Analysis Date: **10/17/2019 3:20:56 PM** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	46.9	4.19	52.36	0	89.6	68	126	5.14	30	
Surr: Tetrachlorethene	9.82		8.378		117	70	134	0	0	

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_191017A

Sample ID: **ICV-191017**	Batch ID: **R106990**	TestNo: **M8015V**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC4_191017A**	Analysis Date: **10/17/2019 10:31:12 A**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	5.35	0.200	5.000	0	107	80	120			
Surr: Tetrachlorethene	0.499		0.4000		125	70	134			

Sample ID: **CCV1-191017**	Batch ID: **R106990**	TestNo: **M8015V**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC4_191017A**	Analysis Date: **10/17/2019 3:44:43 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.56	0.200	2.500	0	102	80	120			
Surr: Tetrachlorethene	0.447		0.4000		112	70	134			

Sample ID: **CCV2-191017**	Batch ID: **R106990**	TestNo: **M8015V**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC4_191017A**	Analysis Date: **10/18/2019 8:07:26 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.05	0.200	2.500	0	82.1	80	120			
Surr: Tetrachlorethene	0.381		0.4000		95.2	70	134			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_191021A

The QC data in batch 93318 applies to the following samples: 1910147-17B, 1910147-18B, 1910147-19B, 1910147-20B, 1910147-21B, 1910147-22B, 1910147-23B, 1910147-24B, 1910147-25B, 1910147-26B, 1910147-27B

Sample ID: **LCS-93318 MEOH** Batch ID: **93318** TestNo: **M8015V** Units: **mg/Kg**
SampType: **LCS** Run ID: **GC4_191021A** Analysis Date: **10/21/2019 11:26:29 A** Prep Date: **10/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.76	0.200	2.500	0	110	68	126			
Surr: Tetrachlorethene	0.470		0.4000		118	70	134			

Sample ID: **LCSD-93318 MEOH** Batch ID: **93318** TestNo: **M8015V** Units: **mg/Kg**
SampType: **LCSD** Run ID: **GC4_191021A** Analysis Date: **10/21/2019 11:50:57 A** Prep Date: **10/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.81	0.200	2.500	0	113	68	126	1.94	30	
Surr: Tetrachlorethene	0.499		0.4000		125	70	134	0	0	

Sample ID: **MB-93318 MEOH** Batch ID: **93318** TestNo: **M8015V** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GC4_191021A** Analysis Date: **10/21/2019 1:03:58 PM** Prep Date: **10/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.100	0.200								
Surr: Tetrachlorethene	0.486		0.4000		121	70	134			

Sample ID: **1910147-17BMS** Batch ID: **93318** TestNo: **M8015V** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GC4_191021A** Analysis Date: **10/21/2019 6:46:03 PM** Prep Date: **10/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	44.6	4.80	60.02	0	74.3	68	126			
Surr: Tetrachlorethene	10.4		9.603		108	70	134			

Sample ID: **SB-191022** Batch ID: **93318** TestNo: **M8015V** Units: **mg/Kg**
SampType: **SBLK** Run ID: **GC4_191021A** Analysis Date: **10/22/2019 3:32:25 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.100	0.200	0							
Surr: Tetrachlorethene	0.512		0.4000		128	70	134			

Sample ID: **1910147-17BMSD** Batch ID: **93318** TestNo: **M8015V** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GC4_191021A** Analysis Date: **10/22/2019 3:56:22 PM** Prep Date: **10/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	52.6	4.80	60.02	0	87.6	68	126	16.4	30	
Surr: Tetrachlorethene	11.2		9.603		117	70	134	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_191021A

Sample ID: **ICV-191021**	Batch ID: **R107010**	TestNo: **M8015V**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC4_191021A**	Analysis Date: **10/21/2019 11:01:47 A**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	5.05	0.200	5.000	0	101	80	120			
Surr: Tetrachlorethene	0.485		0.4000		121	70	134			

Sample ID: **CCV1-191021**	Batch ID: **R107010**	TestNo: **M8015V**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC4_191021A**	Analysis Date: **10/21/2019 5:32:20 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.59	0.200	2.500	0	104	80	120			
Surr: Tetrachlorethene	0.497		0.4000		124	70	134			

Sample ID: **CCV2-191021**	Batch ID: **R107010**	TestNo: **M8015V**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC4_191021A**	Analysis Date: **10/21/2019 8:47:42 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.57	0.200	2.500	0	103	80	120			
Surr: Tetrachlorethene	0.509		0.4000		127	70	134			

Sample ID: **ICV-191022**	Batch ID: **R107010**	TestNo: **M8015V**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **GC4_191021A**	Analysis Date: **10/22/2019 2:44:25 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	3.28	0.200	5.000	0	65.5	80	120			S
Surr: Tetrachlorethene	0.312		0.4000		77.9	70	134			

Sample ID: **CCV3-191022**	Batch ID: **R107010**	TestNo: **M8015V**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **GC4_191021A**	Analysis Date: **10/22/2019 4:20:16 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.15	0.200	2.500	0	85.9	80	120			
Surr: Tetrachlorethene	0.462		0.4000		115	70	134			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_191025A

The QC data in batch 93398 applies to the following samples: 1910147-01C , 1910147-02C, 1910147-03C, 1910147-04C, 1910147-05C, 1910147-06C, 1910147-07C, 1910147-08C, 1910147-09C, 1910147-10C, 1910147-11C, 1910147-12C, 1910147-13C, 1910147-14C, 1910147-15C, 1910147-17C, 1910147-18C, 1910147-19C, 1910147-20C, 1910147-21C

Sample ID: **MB-93398** Batch ID: **93398** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **MBLK** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 11:09:48 A** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0160	0.0400								

Sample ID: **LCS-93398** Batch ID: **93398** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **LCS** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 11:12:04 A** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.203	0.0400	0.2000	0	102	85	115			

Sample ID: **LCSD-93398** Batch ID: **93398** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **LCSD** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 11:14:20 A** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.203	0.0400	0.2000	0	102	85	115	0	25	

Sample ID: **1910147-01C SD** Batch ID: **93398** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **SD** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:07:33 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0796	0.199	0	0				0	10	

Sample ID: **1910147-01C PDS** Batch ID: **93398** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **PDS** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:09:50 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.262	0.0398	0.2487	0	105	85	115			

Sample ID: **1910147-01C MS** Batch ID: **93398** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:12:06 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.213	0.0408	0.2038	0	105	80	120			

Sample ID: **1910147-01C MSD** Batch ID: **93398** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:14:23 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.212	0.0401	0.2007	0	106	80	120	0.554	25	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_191025A

The QC data in batch 93400 applies to the following samples: 1910147-22C, 1910147-23C, 1910147-24C, 1910147-25C, 1910147-26C, 1910147-27C

Sample ID: **MB-93400** Batch ID: **93400** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **MBLK** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:21:15 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0160	0.0400								

Sample ID: **LCS-93400** Batch ID: **93400** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **LCS** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:23:31 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.206	0.0400	0.2000	0	103	85	115			

Sample ID: **LCSD-93400** Batch ID: **93400** TestNo: **SW7471B** Units: **mg/Kg**
SampType: **LCSD** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:25:46 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.203	0.0400	0.2000	0	102	85	115	1.47	25	

Sample ID: **1910147-27C SD** Batch ID: **93400** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **SD** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:43:45 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0856	0.214	0	0.06473				0	10	

Sample ID: **1910147-27C PDS** Batch ID: **93400** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **PDS** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:46:00 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.326	0.0428	0.2675	0.06473	97.8	85	115			

Sample ID: **1910147-27C MS** Batch ID: **93400** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:48:16 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.274	0.0403	0.2016	0.06473	104	80	120			

Sample ID: **1910147-27C MSD** Batch ID: **93400** TestNo: **SW7471B** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **CETAC2_HG_191025A** Analysis Date: **10/25/2019 12:50:32 P** Prep Date: **10/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.288	0.0459	0.2294	0.06473	97.3	80	120	4.91	25	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC2_HG_191025A

Sample ID: **ICV-191025**	Batch ID: **R107110**	TestNo: **SW7471B**	Units: **mg/Kg**
SampType: **ICV**	Run ID: **CETAC2_HG_191025A**	Analysis Date: **10/25/2019 11:05:15 A**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00407	0.0400	0.004000	0	102	90	110			

Sample ID: **CCV1-191025**	Batch ID: **R107110**	TestNo: **SW7471B**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **CETAC2_HG_191025A**	Analysis Date: **10/25/2019 11:40:17 A**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00203	0.0400	0.002000	0	102	90	110			

Sample ID: **CCV2-191025**	Batch ID: **R107110**	TestNo: **SW7471B**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **CETAC2_HG_191025A**	Analysis Date: **10/25/2019 12:16:41 P**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00201	0.0400	0.002000	0	101	90	110			

Sample ID: **CCV3-191025**	Batch ID: **R107110**	TestNo: **SW7471B**	Units: **mg/Kg**
SampType: **CCV**	Run ID: **CETAC2_HG_191025A**	Analysis Date: **10/25/2019 1:01:04 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00203	0.0400	0.002000	0	102	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_191023A

The QC data in batch 93341 applies to the following samples: 1910147-01C, 1910147-02C, 1910147-03C, 1910147-04C, 1910147-05C, 1910147-06C, 1910147-07C, 1910147-08C, 1910147-09C, 1910147-10C, 1910147-11C, 1910147-12C, 1910147-13C, 1910147-14C, 1910147-15C, 1910147-17C, 1910147-18C, 1910147-19C, 1910147-20C, 1910147-21C

Sample ID: **MB-93341** Batch ID: **93341** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 11:14:00 A** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.500	1.00								
Barium	<0.500	2.00								
Cadmium	<0.100	0.300								
Chromium	<0.500	2.00								
Lead	<0.100	0.300								
Selenium	<0.150	0.500								
Silver	<0.100	0.200								

Sample ID: **LCS-93341** Batch ID: **93341** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **LCS** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 11:16:00 A** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	50.5	1.00	50.00	0	101	80	120			
Barium	50.4	2.00	50.00	0	101	80	120			
Cadmium	50.9	0.300	50.00	0	102	80	120			
Chromium	51.8	2.00	50.00	0	104	80	120			
Lead	50.1	0.300	50.00	0	100	80	120			
Selenium	50.2	0.500	50.00	0	100	80	120			
Silver	50.9	0.200	50.00	0	102	80	120			

Sample ID: **LCSD-93341** Batch ID: **93341** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **LCSD** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 11:18:00 A** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	50.6	1.00	50.00	0	101	80	120	0.124	25	
Barium	51.0	2.00	50.00	0	102	80	120	1.11	25	
Cadmium	51.2	0.300	50.00	0	102	80	120	0.619	25	
Chromium	52.5	2.00	50.00	0	105	80	120	1.38	25	
Lead	50.3	0.300	50.00	0	101	80	120	0.420	25	
Selenium	49.9	0.500	50.00	0	99.8	80	120	0.602	25	
Silver	50.7	0.200	50.00	0	101	80	120	0.343	25	

Sample ID: **1910147-07C SD** Batch ID: **93341** TestNo: **SW6020A** Units: **mg/Kg-dry**
SampType: **SD** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 11:24:00 A** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	3.56	4.99	0	3.606				1.40	10	
Barium	147	9.98	0	146.5				0.254	10	
Cadmium	0.649	1.50	0	0.6330				2.45	10	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_191023A

Sample ID: **1910147-07C SD**	Batch ID: **93341**	TestNo: **SW6020A**	Units: **mg/Kg-dry**
SampType: **SD**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 11:24:00 A**	Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	48.4	9.98	0	46.93				3.03	10	
Lead	17.8	1.50	0	18.24				2.70	10	
Selenium	0.880	2.50	0	1.148				26.5	10	R
Silver	<0.499	0.998	0	0				0	10	

Sample ID: **1910147-07C PDS**	Batch ID: **93341**	TestNo: **SW6020A**	Units: **mg/Kg-dry**
SampType: **PDS**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 11:44:00 A**	Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	56.1	0.998	49.90	3.606	105	80	120			
Barium	204	2.00	49.90	146.5	116	80	120			
Cadmium	49.8	0.299	49.90	0.6330	98.6	80	120			
Chromium	100	2.00	49.90	46.93	106	80	120			
Lead	69.6	0.299	49.90	18.24	103	80	120			
Selenium	53.2	0.499	49.90	1.148	104	80	120			
Silver	47.5	0.200	49.90	0	95.1	80	120			

Sample ID: **1910147-07C MS**	Batch ID: **93341**	TestNo: **SW6020A**	Units: **mg/Kg-dry**
SampType: **MS**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 11:46:00 A**	Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	57.8	1.07	53.74	3.606	101	80	120			
Barium	211	2.15	53.74	146.5	121	80	120			S
Cadmium	52.5	0.322	53.74	0.6330	96.6	80	120			
Chromium	107	2.15	53.74	46.93	112	80	120			
Lead	74.9	0.322	53.74	18.24	105	80	120			
Selenium	56.4	0.537	53.74	1.148	103	80	120			
Silver	49.5	0.215	53.74	0	92.1	80	120			

Sample ID: **1910147-07C MSD**	Batch ID: **93341**	TestNo: **SW6020A**	Units: **mg/Kg-dry**
SampType: **MSD**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 11:48:00 A**	Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	59.0	1.04	52.23	3.606	106	80	120	2.14	25	
Barium	242	2.09	52.23	146.5	184	80	120	13.7	25	S
Cadmium	51.1	0.313	52.23	0.6330	96.6	80	120	2.74	25	
Chromium	96.0	2.09	52.23	46.93	93.9	80	120	10.8	25	
Lead	76.3	0.313	52.23	18.24	111	80	120	1.87	25	
Selenium	57.0	0.522	52.23	1.148	107	80	120	1.07	25	
Silver	48.7	0.209	52.23	0	93.1	80	120	1.67	25	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_191023A

The QC data in batch 93342 applies to the following samples: 1910147-22C, 1910147-23C, 1910147-24C, 1910147-25C, 1910147-26C, 1910147-27C

Sample ID: **MB-93342** Batch ID: **93342** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **MBLK** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 12:38:00 P** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.500	1.00								
Barium	<0.500	2.00								
Cadmium	<0.100	0.300								
Chromium	<0.500	2.00								
Lead	<0.100	0.300								
Selenium	<0.150	0.500								
Silver	<0.100	0.200								

Sample ID: **LCS-93342** Batch ID: **93342** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **LCS** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 12:48:00 P** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	50.9	1.00	50.00	0	102	80	120			
Barium	50.8	2.00	50.00	0	102	80	120			
Cadmium	50.5	0.300	50.00	0	101	80	120			
Chromium	51.9	2.00	50.00	0	104	80	120			
Lead	49.4	0.300	50.00	0	98.8	80	120			
Selenium	49.0	0.500	50.00	0	97.9	80	120			
Silver	49.9	0.200	50.00	0	99.8	80	120			

Sample ID: **LCSD-93342** Batch ID: **93342** TestNo: **SW6020A** Units: **mg/Kg**
SampType: **LCSD** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 12:50:00 P** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	50.3	1.00	50.00	0	101	80	120	1.18	25	
Barium	51.2	2.00	50.00	0	102	80	120	0.854	25	
Cadmium	51.0	0.300	50.00	0	102	80	120	0.990	25	
Chromium	52.4	2.00	50.00	0	105	80	120	0.972	25	
Lead	49.6	0.300	50.00	0	99.1	80	120	0.346	25	
Selenium	48.4	0.500	50.00	0	96.8	80	120	1.15	25	
Silver	50.7	0.200	50.00	0	101	80	120	1.47	25	

Sample ID: **1910202-02A SD** Batch ID: **93342** TestNo: **SW6020A** Units: **mg/Kg-dry**
SampType: **SD** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 12:56:00 P** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	60.0	4.63	0	61.73				2.88	10	
Barium	41.6	9.26	0	41.67				0.229	10	
Cadmium	<0.463	1.39	0	0.1035				0	10	
Chromium	5.57	9.26	0	5.348				4.05	10	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_191023A

Sample ID: **1910202-02A SD** Batch ID: **93342** TestNo: **SW6020A** Units: **mg/Kg-dry**
SampType: **SD** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 12:56:00 P** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	2.82	1.39	0	2.920				3.35	10	
Selenium	1.85	2.32	0	2.307				22.1	10	R
Silver	<0.463	0.926	0	0				0	10	

Sample ID: **1910202-02A PDS** Batch ID: **93342** TestNo: **SW6020A** Units: **mg/Kg-dry**
SampType: **PDS** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 1:22:00 PM** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	114	0.926	46.31	61.73	113	80	120			
Barium	92.9	1.85	46.31	41.67	111	80	120			
Cadmium	45.7	0.278	46.31	0.1035	98.4	80	120			
Chromium	53.6	1.85	46.31	5.348	104	80	120			
Lead	51.6	0.278	46.31	2.920	105	80	120			
Selenium	50.0	0.463	46.31	2.307	103	80	120			
Silver	44.0	0.185	46.31	0	95.0	80	120			

Sample ID: **1910202-02A MS** Batch ID: **93342** TestNo: **SW6020A** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 1:26:00 PM** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	107	0.951	47.57	61.73	95.1	80	120			
Barium	89.3	1.90	47.57	41.67	100	80	120			
Cadmium	44.4	0.285	47.57	0.1035	93.1	80	120			
Chromium	51.7	1.90	47.57	5.348	97.4	80	120			
Lead	49.5	0.285	47.57	2.920	97.9	80	120			
Selenium	48.2	0.476	47.57	2.307	96.5	80	120			
Silver	42.2	0.190	47.57	0	88.8	80	120			

Sample ID: **1910202-02A MSD** Batch ID: **93342** TestNo: **SW6020A** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 1:30:00 PM** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	106	0.978	48.90	61.73	91.4	80	120	0.541	25	
Barium	88.9	1.96	48.90	41.67	96.6	80	120	0.386	25	
Cadmium	46.0	0.293	48.90	0.1035	93.8	80	120	3.51	25	
Chromium	52.8	1.96	48.90	5.348	97.0	80	120	2.06	25	
Lead	52.2	0.293	48.90	2.920	101	80	120	5.29	25	
Selenium	49.1	0.489	48.90	2.307	95.7	80	120	1.84	25	
Silver	44.1	0.196	48.90	0	90.2	80	120	4.40	25	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_191023A

Sample ID: **ICV-191023**	Batch ID: **R107072**	TestNo: **SW6020A**	Units: **mg/L**
SampType: **ICV**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 11:04:00 A**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0959	0.00500	0.100	0	95.9	90	110			
Barium	0.0948	0.0100	0.100	0	94.8	90	110			
Cadmium	0.0977	0.00100	0.100	0	97.7	90	110			
Chromium	0.102	0.00500	0.100	0	102	90	110			
Lead	0.0959	0.00100	0.100	0	95.9	90	110			
Selenium	0.0970	0.00500	0.100	0	97.0	90	110			
Silver	0.0955	0.00200	0.100	0	95.5	90	110			

Sample ID: **LCVL-191023**	Batch ID: **R107072**	TestNo: **SW6020A**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 11:08:00 A**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00496	0.00500	0.00500	0	99.2	70	130			
Barium	0.00476	0.0100	0.00500	0	95.2	70	130			
Cadmium	0.00106	0.00100	0.00100	0	106	70	130			
Chromium	0.00511	0.00500	0.00500	0	102	70	130			
Lead	0.000947	0.00100	0.00100	0	94.7	70	130			
Selenium	0.00454	0.00500	0.00500	0	90.9	70	130			
Silver	0.00191	0.00200	0.00200	0	95.6	70	130			

Sample ID: **CCV1-191023**	Batch ID: **R107072**	TestNo: **SW6020A**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 11:59:00 A**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.197	0.00500	0.200	0	98.6	90	110			
Barium	0.200	0.0100	0.200	0	100	90	110			
Cadmium	0.207	0.00100	0.200	0	103	90	110			
Chromium	0.208	0.00500	0.200	0	104	90	110			
Lead	0.193	0.00100	0.200	0	96.4	90	110			
Selenium	0.195	0.00500	0.200	0	97.7	90	110			
Silver	0.202	0.00200	0.200	0	101	90	110			

Sample ID: **LCVL1-191023**	Batch ID: **R107072**	TestNo: **SW6020A**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 12:04:00 P**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00471	0.00500	0.00500	0	94.2	70	130			
Barium	0.00495	0.0100	0.00500	0	99.1	70	130			
Cadmium	0.00104	0.00100	0.00100	0	104	70	130			
Chromium	0.00501	0.00500	0.00500	0	100	70	130			
Lead	0.000941	0.00100	0.00100	0	94.1	70	130			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_191023A

Sample ID: **LCVL1-191023** Batch ID: **R107072** TestNo: **SW6020A** Units: **mg/L**
SampType: **LCVL** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 12:04:00 P** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Selenium	0.00528	0.00500	0.00500	0	106	70	130			
Silver	0.00202	0.00200	0.00200	0	101	70	130			

Sample ID: **CCV2-191023** Batch ID: **R107072** TestNo: **SW6020A** Units: **mg/L**
SampType: **CCV** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 12:30:00 P** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.197	0.00500	0.200	0	98.5	90	110			
Barium	0.198	0.0100	0.200	0	98.9	90	110			
Cadmium	0.200	0.00100	0.200	0	99.8	90	110			
Chromium	0.201	0.00500	0.200	0	101	90	110			
Lead	0.191	0.00100	0.200	0	95.7	90	110			
Selenium	0.197	0.00500	0.200	0	98.6	90	110			
Silver	0.194	0.00200	0.200	0	97.1	90	110			

Sample ID: **LCVL2-191023** Batch ID: **R107072** TestNo: **SW6020A** Units: **mg/L**
SampType: **LCVL** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 12:34:00 P** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00487	0.00500	0.00500	0	97.4	70	130			
Barium	0.00497	0.0100	0.00500	0	99.4	70	130			
Cadmium	0.00102	0.00100	0.00100	0	102	70	130			
Chromium	0.00511	0.00500	0.00500	0	102	70	130			
Lead	0.000939	0.00100	0.00100	0	93.9	70	130			
Selenium	0.00489	0.00500	0.00500	0	97.7	70	130			
Silver	0.00195	0.00200	0.00200	0	97.6	70	130			

Sample ID: **CCV3-191023** Batch ID: **R107072** TestNo: **SW6020A** Units: **mg/L**
SampType: **CCV** Run ID: **ICP-MS4_191023A** Analysis Date: **10/23/2019 1:32:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.200	0.00500	0.200	0	99.8	90	110			
Barium	0.204	0.0100	0.200	0	102	90	110			
Cadmium	0.202	0.00100	0.200	0	101	90	110			
Chromium	0.206	0.00500	0.200	0	103	90	110			
Lead	0.197	0.00100	0.200	0	98.7	90	110			
Selenium	0.200	0.00500	0.200	0	99.9	90	110			
Silver	0.193	0.00200	0.200	0	96.7	90	110			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS4_191023A

Sample ID: **LCVL3-191023**	Batch ID: **R107072**	TestNo: **SW6020A**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 1:40:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.00510	0.00500	0.00500	0	102	70	130			
Barium	0.00529	0.0100	0.00500	0	106	70	130			
Cadmium	0.000989	0.00100	0.00100	0	98.9	70	130			
Chromium	0.00502	0.00500	0.00500	0	100	70	130			
Lead	0.00103	0.00100	0.00100	0	103	70	130			
Selenium	0.00460	0.00500	0.00500	0	92.0	70	130			
Silver	0.00195	0.00200	0.00200	0	97.6	70	130			

Sample ID: **CCV4-191023**	Batch ID: **R107072**	TestNo: **SW6020A**	Units: **mg/L**
SampType: **CCV**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 2:04:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.205	0.0100	0.200	0	102	90	110			

Sample ID: **LCVL4-191023**	Batch ID: **R107072**	TestNo: **SW6020A**	Units: **mg/L**
SampType: **LCVL**	Run ID: **ICP-MS4_191023A**	Analysis Date: **10/23/2019 2:08:00 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.00500	0.0100	0.00500	0	100	70	130			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_191017A

The QC data in batch 93271 applies to the following samples: 1910147-01A, 1910147-02A, 1910147-03A, 1910147-04A, 1910147-05A, 1910147-06A, 1910147-07A, 1910147-08A, 1910147-09A, 1910147-10A, 1910147-11A, 1910147-12A, 1910147-13A, 1910147-14A, 1910147-15A

Sample ID: **LCS-93271 MEOH** Batch ID: **93271** TestNo: **SW8260C** Units: **mg/Kg**
SampType: **LCS** Run ID: **GCMS1_191017A** Analysis Date: **10/17/2019 11:45:00 A** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0266	0.00500	0.0232	0	115	73	126			
Ethylbenzene	0.0239	0.00500	0.0232	0	103	74	127			
Toluene	0.0265	0.00500	0.0232	0	114	71	127			
Xylenes, Total	0.0714	0.00500	0.0696	0	103	75	125			
Surr: 1,2-Dichloroethane-d4	57.2		50.00		114	52	149			
Surr: 4-Bromofluorobenzene	49.3		50.00		98.7	84	118			
Surr: Dibromofluoromethane	53.0		50.00		106	65	135			
Surr: Toluene-d8	48.0		50.00		96.0	84	116			

Sample ID: **MB-93271 MEOH** Batch ID: **93271** TestNo: **SW8260C** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GCMS1_191017A** Analysis Date: **10/17/2019 12:24:00 P** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.00100	0.00500								
Ethylbenzene	<0.00100	0.00500								
Toluene	<0.00100	0.00500								
Xylenes, Total	<0.00100	0.00500								
Surr: 1,2-Dichloroethane-d4	56.0		50.00		112	52	149			
Surr: 4-Bromofluorobenzene	50.1		50.00		100	84	118			
Surr: Dibromofluoromethane	51.0		50.00		102	65	135			
Surr: Toluene-d8	48.6		50.00		97.2	84	116			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_191017A

Sample ID: **ICV-191017** Batch ID: **R106939** TestNo: **SW8260C** Units: **mg/Kg**
SampType: **ICV** Run ID: **GCMS1_191017A** Analysis Date: **10/17/2019 10:40:00 A** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0501	0.00500	0.0464	0	108	80	120			
Ethylbenzene	0.0475	0.00500	0.0464	0	102	80	120			
Toluene	0.0515	0.00500	0.0464	0	111	80	120			
Xylenes, Total	0.144	0.00500	0.139	0	104	80	120			
Surr: 1,2-Dichloroethane-d4	53.5		50.00		107	52	149			
Surr: 4-Bromofluorobenzene	48.8		50.00		97.6	84	118			
Surr: Dibromofluoromethane	50.9		50.00		102	65	135			
Surr: Toluene-d8	47.7		50.00		95.4	84	116			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_191018A

The QC data in batch 93302 applies to the following samples: 1910147-17A, 1910147-18A, 1910147-19A, 1910147-20A, 1910147-21A, 1910147-22A, 1910147-23A, 1910147-24A, 1910147-25A, 1910147-26A, 1910147-27A

Sample ID: **LCS-93302 MEOH** Batch ID: **93302** TestNo: **SW8260C** Units: **mg/Kg**
SampType: **LCS** Run ID: **GCMS1_191018A** Analysis Date: **10/18/2019 11:38:00 A** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0257	0.00500	0.0232	0	111	73	126			
Ethylbenzene	0.0232	0.00500	0.0232	0	100	74	127			
Toluene	0.0261	0.00500	0.0232	0	113	71	127			
Xylenes, Total	0.0704	0.00500	0.0696	0	101	75	125			
Surr: 1,2-Dichloroethane-d4	59.6		50.00		119	52	149			
Surr: 4-Bromofluorobenzene	48.8		50.00		97.7	84	118			
Surr: Dibromofluoromethane	51.5		50.00		103	65	135			
Surr: Toluene-d8	48.6		50.00		97.1	84	116			

Sample ID: **MB-93302 MEOH** Batch ID: **93302** TestNo: **SW8260C** Units: **mg/Kg**
SampType: **MBLK** Run ID: **GCMS1_191018A** Analysis Date: **10/18/2019 12:13:00 P** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.00100	0.00500								
Ethylbenzene	<0.00100	0.00500								
Toluene	<0.00100	0.00500								
Xylenes, Total	<0.00100	0.00500								
Surr: 1,2-Dichloroethane-d4	59.0		50.00		118	52	149			
Surr: 4-Bromofluorobenzene	51.3		50.00		103	84	118			
Surr: Dibromofluoromethane	51.4		50.00		103	65	135			
Surr: Toluene-d8	48.2		50.00		96.5	84	116			

Sample ID: **1910147-27AMS** Batch ID: **93302** TestNo: **SW8260C** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GCMS1_191018A** Analysis Date: **10/18/2019 9:37:00 PM** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.39	0.297	1.38	0	101	73	126			
Ethylbenzene	1.24	0.297	1.38	0	89.9	74	127			
Toluene	1.38	0.297	1.38	0	100	71	127			
Xylenes, Total	3.74	0.297	4.13	0	90.5	75	125			
Surr: 1,2-Dichloroethane-d4	3030		2968		102	52	149			
Surr: 4-Bromofluorobenzene	2810		2968		94.8	84	118			
Surr: Dibromofluoromethane	3020		2968		102	65	135			
Surr: Toluene-d8	2810		2968		94.7	84	116			

Sample ID: **1910147-27AMSD** Batch ID: **93302** TestNo: **SW8260C** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GCMS1_191018A** Analysis Date: **10/18/2019 10:08:00 P** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_191018A

Sample ID: **1910147-27AMSD** Batch ID: **93302** TestNo: **SW8260C** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GCMS1_191018A** Analysis Date: **10/18/2019 10:08:00 P** Prep Date: **10/18/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.39	0.297	1.38	0	101	73	126	0.025	30	
Ethylbenzene	1.23	0.297	1.38	0	89.3	74	127	0.726	30	
Toluene	1.39	0.297	1.38	0	101	71	127	0.621	30	
Xylenes, Total	3.75	0.297	4.13	0	90.7	75	125	0.243	30	
Surr: 1,2-Dichloroethane-d4	3050		2968		103	52	149	0	0	
Surr: 4-Bromofluorobenzene	2750		2968		92.7	84	118	0	0	
Surr: Dibromofluoromethane	3040		2968		102	65	135	0	0	
Surr: Toluene-d8	2900		2968		97.6	84	116	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_191018A

Sample ID: **ICV-191018** Batch ID: **R106975** TestNo: **SW8260C** Units: **mg/Kg**
SampType: **ICV** Run ID: **GCMS1_191018A** Analysis Date: **10/18/2019 10:58:00 A** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0523	0.00500	0.0464	0	113	80	120			
Ethylbenzene	0.0456	0.00500	0.0464	0	98.2	80	120			
Toluene	0.0529	0.00500	0.0464	0	114	80	120			
Xylenes, Total	0.140	0.00500	0.139	0	101	80	120			
Surr: 1,2-Dichloroethane-d4	56.4		50.00		113	52	149			
Surr: 4-Bromofluorobenzene	50.7		50.00		101	84	118			
Surr: Dibromofluoromethane	52.0		50.00		104	65	135			
Surr: Toluene-d8	46.8		50.00		93.6	84	116			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_191021A

The QC data in batch 93271 applies to the following samples: 1910147-01A, 1910147-02A, 1910147-03A, 1910147-04A, 1910147-05A, 1910147-06A, 1910147-07A, 1910147-08A, 1910147-09A, 1910147-10A, 1910147-11A, 1910147-12A, 1910147-13A, 1910147-14A, 1910147-15A

Sample ID: **SB-191021** Batch ID: **93271** TestNo: **SW8260C** Units: **mg/Kg**
SampType: **SBLK** Run ID: **GCMS1_191021A** Analysis Date: **10/21/2019 11:38:00 A** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.00100	0.00500	0							
Ethylbenzene	<0.00100	0.00500	0							
Toluene	<0.00100	0.00500	0							
Xylenes, Total	<0.00100	0.00500	0							
Surr: 1,2-Dichloroethane-d4	50.2		0							
Surr: 4-Bromofluorobenzene	48.8		0							
Surr: Dibromofluoromethane	50.7		0							
Surr: Toluene-d8	47.6		0							

Sample ID: **1910147-03AMS** Batch ID: **93271** TestNo: **SW8260C** Units: **mg/Kg-dry**
SampType: **MS** Run ID: **GCMS1_191021A** Analysis Date: **10/21/2019 2:46:00 PM** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.25	0.262	1.22	0	102	73	126			
Ethylbenzene	1.15	0.262	1.22	0	94.5	74	127			
Toluene	1.25	0.262	1.22	0	102	71	127			
Xylenes, Total	3.39	0.262	3.65	0	92.7	75	125			
Surr: 1,2-Dichloroethane-d4	2680		2623		102	52	149			
Surr: 4-Bromofluorobenzene	2530		2623		96.3	84	118			
Surr: Dibromofluoromethane	2700		2623		103	65	135			
Surr: Toluene-d8	2550		2623		97.1	84	116			

Sample ID: **1910147-03AMSD** Batch ID: **93271** TestNo: **SW8260C** Units: **mg/Kg-dry**
SampType: **MSD** Run ID: **GCMS1_191021A** Analysis Date: **10/21/2019 3:17:00 PM** Prep Date: **10/17/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.21	0.262	1.22	0	99.6	73	126	2.69	30	
Ethylbenzene	1.11	0.262	1.22	0	90.9	74	127	3.86	30	
Toluene	1.24	0.262	1.22	0	102	71	127	0.337	30	
Xylenes, Total	3.39	0.262	3.65	0	92.8	75	125	0.046	30	
Surr: 1,2-Dichloroethane-d4	2590		2623		98.7	52	149	0	0	
Surr: 4-Bromofluorobenzene	2470		2623		94.1	84	118	0	0	
Surr: Dibromofluoromethane	2650		2623		101	65	135	0	0	
Surr: Toluene-d8	2490		2623		95.0	84	116	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS1_191021A

Sample ID: **ICV-191021** Batch ID: **R106995** TestNo: **SW8260C** Units: **mg/Kg**
SampType: **ICV** Run ID: **GCMS1_191021A** Analysis Date: **10/21/2019 10:35:00 A** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0417	0.00500	0.0464	0	89.8	80	120			
Ethylbenzene	0.0367	0.00500	0.0464	0	79.1	80	120			S
Toluene	0.0422	0.00500	0.0464	0	91.1	80	120			
Xylenes, Total	0.113	0.00500	0.139	0	80.9	80	120			
Surr: 1,2-Dichloroethane-d4	54.8		50.00		110	52	149			
Surr: 4-Bromofluorobenzene	51.0		50.00		102	84	118			
Surr: Dibromofluoromethane	55.3		50.00		111	65	135			
Surr: Toluene-d8	47.0		50.00		93.9	84	116			

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_191022A

The QC data in batch 93358 applies to the following samples: 1910147-01C, 1910147-02C, 1910147-03C, 1910147-04C, 1910147-05C, 1910147-06C, 1910147-07C, 1910147-08C, 1910147-09C, 1910147-10C, 1910147-11C, 1910147-12C, 1910147-13C

Sample ID: **1910147-09C-DUP** Batch ID: **93358** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_191022A** Analysis Date: **10/23/2019 8:45:00 AM** Prep Date: **10/22/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	24.4	0	0	30.02				20.7	30	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1910147
Project: Empire ABO/Clark Bldg

ANALYTICAL QC SUMMARY REPORT

RunID: PMOIST_191023A

The QC data in batch 93380 applies to the following samples: 1910147-14C, 1910147-15C, 1910147-17C, 1910147-18C, 1910147-19C, 1910147-20C, 1910147-21C, 1910147-22C, 1910147-23C, 1910147-24C, 1910147-25C, 1910147-26C, 1910147-27C

Sample ID: **1910147-25-DUP** Batch ID: **93380** TestNo: **D2216** Units: **WT%**
SampType: **DUP** Run ID: **PMOIST_191023A** Analysis Date: **10/24/2019 8:37:00 AM** Prep Date: **10/23/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	23.5	0	0	23.01				2.16	30	

Qualifiers:

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

DHL ANALYTICAL

June 25, 2019

Mark Larson
Larson & Associates
507 N. Marienfeld #205
Midland, TX 79701
TEL: (432) 687-0901
FAX (432) 687-0456

Order No.: 1906173

RE: AKA Energy/Empire ABO

Dear Mark Larson:

DHL Analytical, Inc. received 1 sample(s) on 6/18/2019 for the analyses presented in the following report.

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

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

Sincerely,

John DuPont
General Manager

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

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1900173

№ 0289

CHAIN-OF-CUSTODY

Larson & Associates, Inc.
Environmental Consultants
507 N. Marienfeld, Ste. 200
Midland, TX 79701
432-687-0901

Data Reported to: Mark Larson

DATE: 6-17-2019 PAGE 1 OF 1

PO#:

LAB WORK ORDER#: Enviro Tech

PROJECT LOCATION OR NAME: AKA Energy ~~AH-Otis-#1~~

LAI PROJECT #: 6-0141-11 COLLECTOR: ML

TRRP report? ☐ Yes ☑ No

TIME ZONE: Time zone/State: Mtn/NM

S=SOIL P=PAINT
W=WATER SL=SLUDGE
A=AIR OT=OTHER

Field Sample I.D.	Lab #	Date	Time	Matrix	# of Containers	PRESERVATION: HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES: BTEX ☑ MTBE ☐	TRPH 418.1 ☐	TPH 1005 ☑ TPH 1006 ☐	GASOLINE MOD 8015 ☑	DIESEL - MOD 8015 ☑	OIL - MOD 8015 ☑	VOC 8260 ☐	SVOC 8270 ☐ PAH 8270 ☐ HOLDPAH ☐	8081 PESTICIDES ☐ 8151 HERBICIDES ☐	8082 PCBS ☐	TBLP - METALS (RCRA) ☐ TCLP VOC ☐	TCLP - PEST ☐ HERB ☐ Semi-VOC ☐	TOTAL METALS (RCRA) ☐ OTHER LIST ☐	LEAD - TOTAL ☐ D.W. 200.8 ☐ TCLP ☐	RCI ☐ TOX ☐ FLASHPOINT ☐	TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐	pH ☐ HEXAVALENT CHROMIUM ☐	EXPLOSIVES ☑ PECHLORATE ☐	CHLORIDE ☑ ANIONS ☐ ALKALINITY ☐	FIELD NOTES
Eng '9	01	6/12/19	12:22	S					✓		✓		✓	✓	✓	✓													✓	
TOTAL																														

RELINQUISHED BY:(Signature) DATE/TIME 6/17/19 15:00 RECEIVED BY: (Signature) LSO

RELINQUISHED BY:(Signature) LSO DATE/TIME 6/18/19 7:43 ~~7:43~~ RECEIVED BY: (Signature)

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

LABORATORY: DHL

3

TURN AROUND TIME
NORMAL ☑
1 DAY ☐
2 DAY ☐
OTHER ☐

LABORATORY USE ONLY:
RECEIVING TEMP: 4.7°C THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☑ CARRIER BILL #
☐ HAND DELIVERED

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Airbill No. LSO065Y5

LSO065Y5

1. To: Print Name (Person) | Phone (Important)

Company Name

Street Address (No P.O. Box or P.O. Box Zip Code*Deliveries)

Suite / Floor

City | State | Zip

2. From: Print Name (Person) JOHN MEITZ | Phone (Important) 432-687-0901

Company Name LARSON & ASSOCIATES

Street Address 507 NORTH MARIENFELD

Suite / Floor 205

City MIDLAND | State TX | Zip 79701

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- ☐ LSO Economy Next Day* By 3 p.m. to most cities
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- ☐ LSO Ground
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- ☐ Other

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CUSTODY SEAL

DATE 6/17/19

SIGNATURE

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Released to Imaging: 4/3/2023 3:36:09 PM

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name Larson & Associates

Date Received: 6/18/2019

Work Order Number 1906173

Received by JW

Checklist completed by: Signature 6/18/2019 Date

Reviewed by Initials 6/18/2019 Date

Carrier name LoneStar

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	4.7 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by
Water - ph>9 (S) or ph>10 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted?		Checked by

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

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Page 1 of 1

Received by OCD: 4/3/2023 2:46:30 PM

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DHL Analytical, Inc. **Date:** *25-Jun-19*

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1906173

CASE NARRATIVE

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

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

As per the NELAP accreditation requirement the following must be noted: NMED guidance on the collection of soil for VOC analysis requires the use of Method 5035 and will reject VOC data reported for soil samples collected and prepared using another method. NELAP requires a note that if 5035 sampling method for VOCs is not utilized, the results of samples collected in bulk containers for low level volatile components may be compromised. The client has been notified and has requested the Laboratory to proceed with analysis; these results are "C" flagged in the Analytical Data Report.

As per the NELAP accreditation requirement the following must be noted: For GRO analyses of soils, the samples were collected in bulk containers. For analyses reported to the NMED, bulk sampling is not allowed. NELAP requires a note that if 5035 sampling method for GRO is not utilized the results of samples collected in bulk containers for GRO hydrocarbon components may be compromised. The client has been notified and has requested the Laboratory to proceed with analysis; these results are "C" Flagged in the Analytical Data Report.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives except where noted in the following. For DRO Analysis, the recovery of surrogate Octacosane for Sample Eng '9, the Matrix Spike and Matrix Spike Duplicate (1906173-01 MS/MSD) was above the method control limits. These are flagged accordingly in the Analytical Data Report and the QC Summary Report. The remaining surrogate for these samples was within method control limits. No further corrective action was taken.

For DRO Analysis, the recoveries of the Matrix Spike and Matrix Spike Duplicate (1906173-01 MS/MSD) were above the method control limits. These are flagged accordingly in the QC Summary Report. The associated LCS was within method control limits. No further corrective action was taken.

For GRO Analysis, the recoveries of the Matrix Spike and Matrix Spike Duplicate (1906173-01 MS/MSD) were below the method control limits. These are flagged accordingly in the QC Summary Report. The associated LCS was within method control limits. No further corrective action was taken.

For Volatile Organics Analysis, the recoveries of up to three compounds for the Matrix Spike and Matrix Spike Duplicate (1906175-02 MS/MSD) were below the method control limits. These are flagged accordingly in the QC Summary Report. These compounds were within method control limits in the associated LCS. No further corrective action was taken.

CLIENT: Larson & Associates
Project: AKA Energy/Empire ABO
Lab Order: 1906173

CASE NARRATIVE

For Anions Analysis, the recovery of Chloride for the Sample Duplicate (1906173-01 Dup) was above the method control limit. This is flagged accordingly in the QC Summary Report. This anion was within method control limits in the associated LCS. No further corrective action was taken.

For Anions Analysis, Chloride was detected below the reporting limit for Method Blank-91409. This anion was detected in the associated sample at greater than 10x the amount detected in the blank. No further corrective action was taken.

DHL Analytical, Inc.

Date: *25-Jun-19*

CLIENT:	Larson & Associates	**Client Sample ID:**	Eng '9
Project:	AKA Energy/Empire ABO	**Lab ID:**	1906173-01
Project No:	6-0141-11	**Collection Date:**	06/12/19 12:22 PM
Lab Order:	1906173	**Matrix:**	SOIL

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - SOIL		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	3570	35.1	117		mg/Kg-dry	10	06/21/19 01:36 PM
Surr: Isopropylbenzene	75.7	0	47-142		%REC	10	06/21/19 01:36 PM
Surr: Octacosane	1180	0	25-162	S	%REC	10	06/21/19 01:36 PM
TPH PURGEABLE BY GC - SOIL		**M8015V**					Analyst: **BTJ**
Gasoline Range Organics	0.434	0.116	0.232	C	mg/Kg-dry	1	06/19/19 01:35 PM
Surr: Tetrachlorethene	117	0	70-134		%REC	1	06/19/19 01:35 PM
8260 SOIL VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Benzene	<0.00114	0.00114	0.00569	C	mg/Kg-dry	1	06/20/19 11:38 AM
Ethylbenzene	0.00335	0.00114	0.00569	JC	mg/Kg-dry	1	06/20/19 11:38 AM
Toluene	0.00140	0.00114	0.00569	JC	mg/Kg-dry	1	06/20/19 11:38 AM
Total Xylenes	0.00787	0.00114	0.00569	C	mg/Kg-dry	1	06/20/19 11:38 AM
Surr: 1,2-Dichloroethane-d4	98.8	0	52-149		%REC	1	06/20/19 11:38 AM
Surr: 4-Bromofluorobenzene	104	0	84-118		%REC	1	06/20/19 11:38 AM
Surr: Dibromofluoromethane	104	0	65-135		%REC	1	06/20/19 11:38 AM
Surr: Toluene-d8	95.5	0	84-116		%REC	1	06/20/19 11:38 AM
ANIONS BY IC METHOD - SOIL		**SW9056A**					Analyst: **JL**
Chloride	41.7	2.19	5.49		mg/Kg-dry	1	06/20/19 01:33 PM
PERCENT MOISTURE		**D2216**					Analyst: **RBW**
Percent Moisture	15.0	0	0		WT%	1	06/25/19 10:15 AM

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

DHL Analytical, Inc. **Date:** *25-Jun-19*

CLIENT: Larson & Associates
Work Order: 1906173
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_190621A

The QC data in batch 91429 applies to the following samples: 1906173-01A

Sample ID **MB-91429**	Batch ID: **91429**	TestNo: **M8015D**	Units: **mg/Kg**
SampType: **MBLK**	Run ID: **GC15_190621A**	Analysis Date: **6/21/2019 11:21:48 AM**	Prep Date: **6/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<3.00	10.0								
Surr: Isopropylbenzene	5.21		7.500		69.4	47	142			
Surr: Octacosane	6.60		7.500		88.0	25	162			

Sample ID **LCS-91429**	Batch ID: **91429**	TestNo: **M8015D**	Units: **mg/Kg**
SampType: **LCS**	Run ID: **GC15_190621A**	Analysis Date: **6/21/2019 11:30:52 AM**	Prep Date: **6/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	84.2	10.0	125.0	0	67.3	50	114			
Surr: Isopropylbenzene	5.44		7.500		72.5	47	142			
Surr: Octacosane	6.36		7.500		84.9	25	162			

Sample ID **1906173-01AMS**	Batch ID: **91429**	TestNo: **M8015D**	Units: **mg/Kg-dry**
SampType: **MS**	Run ID: **GC15_190621A**	Analysis Date: **6/21/2019 1:47:15 PM**	Prep Date: **6/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	4140	116	145.6	3566	398	50	114			S
Surr: Isopropylbenzene	6.58		8.736		75.3	47	142			
Surr: Octacosane	121		8.736		1380	25	162			S

Sample ID **1906173-01AMSD**	Batch ID: **91429**	TestNo: **M8015D**	Units: **mg/Kg-dry**
SampType: **MSD**	Run ID: **GC15_190621A**	Analysis Date: **6/21/2019 1:56:19 PM**	Prep Date: **6/21/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	5170	116	144.7	3566	1110	50	114	22.1	30	S
Surr: Isopropylbenzene	7.81		8.685		89.9	47	142	0	0	
Surr: Octacosane	141		8.685		1630	25	162	0	0	S

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

CLIENT: Larson & Associates
Work Order: 1906173
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_190619A

The QC data in batch 91382 applies to the following samples: 1906173-01A

Sample ID	LCS-91382	Batch ID:	91382	TestNo:	M8015V	Units:	mg/Kg
SampType:	LCS	Run ID:	GC4_190619A	Analysis Date:	6/19/2019 10:02:58 AM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.28	0.200	2.500	0	91.0	68	126			
Surr: Tetrachlorethene	0.421		0.4000		105	70	134			

Sample ID	LCSD-91382	Batch ID:	91382	TestNo:	M8015V	Units:	mg/Kg
SampType:	LCSD	Run ID:	GC4_190619A	Analysis Date:	6/19/2019 10:27:32 AM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	2.27	0.200	2.500	0	90.8	68	126	0.229	30	
Surr: Tetrachlorethene	0.407		0.4000		102	70	134	0	0	

Sample ID	MB-91382	Batch ID:	91382	TestNo:	M8015V	Units:	mg/Kg
SampType:	MBLK	Run ID:	GC4_190619A	Analysis Date:	6/19/2019 11:40:19 AM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.100	0.200								
Surr: Tetrachlorethene	0.448		0.4000		112	70	134			

Sample ID	1906173-01AMS	Batch ID:	91382	TestNo:	M8015V	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GC4_190619A	Analysis Date:	6/19/2019 2:23:52 PM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	1.61	0.230	2.878	0.4343	41.0	68	126			S
Surr: Tetrachlorethene	0.371		0.4605		80.6	70	134			

Sample ID	1906173-01AMSD	Batch ID:	91382	TestNo:	M8015V	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	GC4_190619A	Analysis Date:	6/19/2019 2:47:33 PM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	1.95	0.222	2.775	0.4343	54.5	68	126	18.7	30	S
Surr: Tetrachlorethene	0.342		0.4440		77.1	70	134	0	0	

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

CLIENT: Larson & Associates
Work Order: 1906173
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190619C

The QC data in batch 91378 applies to the following samples: 1906173-01A

Sample ID	LCS-91378	Batch ID:	91378	TestNo:	SW8260C	Units:	mg/Kg
SampType:	LCS	Run ID:	GCMS2_190619C	Analysis Date:	6/19/2019 11:14:00 AM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0225	0.00500	0.0232	0	96.8	75	125			
Ethylbenzene	0.0220	0.00500	0.0232	0	94.9	75	125			
Toluene	0.0227	0.00500	0.0232	0	97.9	75	125			
Total Xylenes	0.0665	0.00500	0.0696	0	95.5	75	125			
Surr: 1,2-Dichloroethane-d4	45.3		50.00		90.7	52	149			
Surr: 4-Bromofluorobenzene	46.7		50.00		93.4	84	118			
Surr: Dibromofluoromethane	51.6		50.00		103	65	135			
Surr: Toluene-d8	47.7		50.00		95.4	84	116			

Sample ID	MB-91378	Batch ID:	91378	TestNo:	SW8260C	Units:	mg/Kg
SampType:	MBLK	Run ID:	GCMS2_190619C	Analysis Date:	6/19/2019 12:39:00 PM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.00100	0.00500								
Ethylbenzene	<0.00100	0.00500								
Toluene	<0.00100	0.00500								
Total Xylenes	<0.00100	0.00500								
Surr: 1,2-Dichloroethane-d4	45.0		50.00		90.1	52	149			
Surr: 4-Bromofluorobenzene	49.6		50.00		99.2	84	118			
Surr: Dibromofluoromethane	49.8		50.00		99.7	65	135			
Surr: Toluene-d8	46.7		50.00		93.4	84	116			

Sample ID	SB-190620	Batch ID:	91378	TestNo:	SW8260C	Units:	mg/Kg
SampType:	SBLK	Run ID:	GCMS2_190619C	Analysis Date:	6/20/2019 9:46:00 AM	Prep Date:	

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.00100	0.00500	0							
Ethylbenzene	<0.00100	0.00500	0							
Toluene	<0.00100	0.00500	0							
Total Xylenes	<0.00100	0.00500	0							
Surr: 1,2-Dichloroethane-d4	48.6		0							
Surr: 4-Bromofluorobenzene	48.6		0							
Surr: Dibromofluoromethane	51.6		0							
Surr: Toluene-d8	45.2		0							

Sample ID	1906175-02AMS	Batch ID:	91378	TestNo:	SW8260C	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GCMS2_190619C	Analysis Date:	6/20/2019 10:42:00 AM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0209	0.00625	0.0290	0	72.1	73	126			S

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1906173
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS2_190619C

Sample ID	1906175-02AMS	Batch ID:	91378	TestNo:	SW8260C	Units:	mg/Kg-dry
SampType:	MS	Run ID:	GCMS2_190619C	Analysis Date:	6/20/2019 10:42:00 AM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	0.0174	0.00625	0.0290	0	59.9	74	127			S
Toluene	0.0214	0.00625	0.0290	0	73.6	71	127			
Total Xylenes	0.0596	0.00625	0.0871	0	68.5	75	125			S
Surr: 1,2-Dichloroethane-d4	64.9		62.54		104	52	149			
Surr: 4-Bromofluorobenzene	60.0		62.54		95.9	84	118			
Surr: Dibromofluoromethane	65.7		62.54		105	65	135			
Surr: Toluene-d8	57.4		62.54		91.8	84	116			

Sample ID	1906175-02AMSD	Batch ID:	91378	TestNo:	SW8260C	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	GCMS2_190619C	Analysis Date:	6/20/2019 11:10:00 AM	Prep Date:	6/19/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0224	0.00654	0.0303	0	73.8	73	126	6.81	30	
Ethylbenzene	0.0195	0.00654	0.0303	0	64.4	74	127	11.6	30	S
Toluene	0.0222	0.00654	0.0303	0	73.1	71	127	3.80	30	
Total Xylenes	0.0631	0.00654	0.0910	0	69.4	75	125	5.67	30	S
Surr: 1,2-Dichloroethane-d4	65.0		65.39		99.4	52	149	0	0	
Surr: 4-Bromofluorobenzene	60.4		65.39		92.4	84	118	0	0	
Surr: Dibromofluoromethane	67.7		65.39		104	65	135	0	0	
Surr: Toluene-d8	60.2		65.39		92.1	84	116	0	0	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1906173
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_190620A

The QC data in batch 91409 applies to the following samples: 1906173-01A

Sample ID	MB-91409	Batch ID:	91409	TestNo:	SW9056A	Units:	mg/Kg
SampType:	MBLK	Run ID:	IC2_190620A	Analysis Date:	6/20/2019 11:38:33 AM	Prep Date:	6/20/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	2.14	5.00								

Sample ID	LCS-91409	Batch ID:	91409	TestNo:	SW9056A	Units:	mg/Kg
SampType:	LCS	Run ID:	IC2_190620A	Analysis Date:	6/20/2019 11:54:33 AM	Prep Date:	6/20/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	55.2	5.00	50.00	0	110	80	120			

Sample ID	LCSD-91409	Batch ID:	91409	TestNo:	SW9056A	Units:	mg/Kg
SampType:	LCSD	Run ID:	IC2_190620A	Analysis Date:	6/20/2019 12:10:33 PM	Prep Date:	6/20/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	56.5	5.00	50.00	0	113	80	120	2.34	15	

Sample ID	1906173-01A-DUP	Batch ID:	91409	TestNo:	SW9056A	Units:	mg/Kg-dry
SampType:	DUP	Run ID:	IC2_190620A	Analysis Date:	6/20/2019 12:45:04 PM	Prep Date:	6/20/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	53.9	55.3	0	40.08				29.5	10	R

Sample ID	1906173-01AMS	Batch ID:	91409	TestNo:	SW9056A	Units:	mg/Kg-dry
SampType:	MS	Run ID:	IC2_190620A	Analysis Date:	6/20/2019 1:01:04 PM	Prep Date:	6/20/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	149	56.0	112.0	40.08	97.0	80	120			

Sample ID	1906173-01AMSD	Batch ID:	91409	TestNo:	SW9056A	Units:	mg/Kg-dry
SampType:	MSD	Run ID:	IC2_190620A	Analysis Date:	6/20/2019 1:17:04 PM	Prep Date:	6/20/2019

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	153	55.4	110.8	40.08	102	80	120	3.06	15	

Qualifiers:

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

CLIENT: Larson & Associates
Work Order: 1906173
Project: AKA Energy/Empire ABO

ANALYTICAL QC SUMMARY REPORT

RunID: **PMOIST_190624A**

The QC data in batch 91473 applies to the following samples: 1906173-01A

Sample ID	**1906139-06A-DUP**	Batch ID:	**91473**	TestNo:	**D2216**	Units:	**WT%**
SampType:	**DUP**	Run ID:	**PMOIST_190624A**	Analysis Date:	**6/25/2019 10:15:00 AM**	Prep Date:	**6/24/2019**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Percent Moisture	16.8	0	0	18.93				12.2	30	

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

Appendix B

Boring Logs

BORING RECORD

GEOLOG UNIT	DEPTH (1"=ft')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X ____) 2 4 6 8 10 12 14 16 18	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS: BACKGROUND PID READING SOIL:____PPM SOIL:____PPM
	1	start 10:36								
	2 .2 .4 .6 .8	silty clay, 2.5 YR, 3/3 very fine grained, quartz sand, dry	CL			1		5	0.5 / 3	10:42
	3	Gypsum, 10 YR, 6/1 to 6/2, hard friable, massive interbedded with very fine grained quartz sand								10:49
	5 .2 .4 .6 .8					2		5	0.5 / 5	10:49
	6									
	7									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AHA / Soil Sampling
HOLE DIAMETER: 8.25
LOCATION: ABQ
LA GEOLOGIST: DW
DRILLING CONTRACTOR: EDI
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-24-19

BORING NUMBER: 06-1

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING PPM X 2 4 6 8 10 12 14 16 18	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING SOIL: PPM SOIL: PPM
	8	Gypsum, 10yr 6/1 to 6/2 hard friable massive, interbedded with very fine grained sand								
	9									
	10					3		6.5	10/6	11:00
	11									
	12									
	13									
	14									
	15									

- ONE CONTINUOUS AUGER SAMPLER
- STANDARD PENETRATION TEST
- UNDISTURBED SAMPLE
- WATER TABLE (24 HOURS)
- WATER TABLE (TIME of BORING)
- L LABORTORY TEST LOCATION
- \+ PENETROMETER (TONS/SQ. FT.)
- NR NO RECOVERY

JOB NAME/NUMBER: AKA / Soil Samplings
HOLE DIAMETER: 8.25
LOCATION: ARO
LA GEOLOGIST: DW
DRILLING CONTRACTOR: EDT
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-24-19

BORING NUMBER: 06-1

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X; 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS: BACKGROUND PID READING SOIL: PPM
	15	End 11:15								
	15 6.2 .4 .6 .8 16	Gypsum Very fine grained, 10yr, 6/2 to 6/3 quartz sand, Dry				4		1'	15/16	11:10
	17									
	18									
	19									
	20 .2 .3	Gypsum interbedded with very fine grained quartz sand TD 20,25				5		0.25'	20/20.25	11:15

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AKA / 06-0141-11
HOLE DIAMETER: 8 1/2
LOCATION: ABQ
LA GEOLOGIST: DN
DRILLING CONTRACTOR: EDT
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-24-19
BORING NUMBER: 6-1

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X ____ ; 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
	1'	Start 11:40								BACKGROUND PID READING SOIL:____PPM SOIL:____PPM
	1	Gypsum, tan, 6/1 10YR, hard crumble, massive, slight hydrocarbon odor								2.5-2.75
	0.2									
	0.4									
	0.6					1		6.5"	7/7	11:45
	.8									
	2									
	3									
	4									
	5					2		6"	6/6	11.55
	.2									
	.4									
	.6									
	6									
	7									
	8									

- ONE CONTINUOUS AUGER SAMPLER
- STANDARD PENETRATION TEST
- UNDISTURBED SAMPLE
- WATER TABLE (24 HOURS)
- WATER TABLE (TIME of BORING)
- L LABORTORY TEST LOCATION
- \+ PENETROMETER (TONS/SQ. FT.)
- NR NO RECOVERY

JOB NAME/NUMBER: AKA / 6-01111
HOLE DIAMETER: 8.25
LOCATION: ADO
LA GEOLOGIST: DW
DRILLING CONTRACTOR: TDJ
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-24-19

BORING NUMBER: 06-2

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING PPM X 2 4 6 8 10 12 14 16 18	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING SOIL: PPM SOIL: PPM
	8									
	9									
	10	Gypsum, 10yr, 6/1 to 6/2, hard, friable, massive				3		0.2'	10.2'/10.4'	12:00
	0.2									
	0.4									
	.6									
	.8									
	11									
	12									
	13									
	14									
	15									
	.2	Quartz sand, 10 yr, 7/1 very fine grained, wet				4		0.5'	15.5'/15.7'	12:05
	.4									
	.6									
	.8									
	16									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
LABORTORY TEST LOCATION
PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER:
HOLE DIAMETER:
LOCATION:
LA GEOLOGIST:
DRILLING CONTRACTOR:
DRILLING METHOD:

Larson & Associates, Inc. Environmental Consultants

DRILL DATE	BORING NUMBER
	06-2

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X; 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS: BACKGROUND PID READING (SOIL: PPM; SOIL: PPM)
	16	End 12:15								
	17									
	18									
	19									
	20	Gypsum, tan, CA & GR hard friable, massive fibrous				S	0.4	6/6	20'	12:15
	.2									
	.4									
	.6									
	.8	TO 20.25								

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER:
HOLE DIAMETER:
LOCATION:
LA GEOLOGIST:
DRILLING CONTRACTOR:
DRILLING METHOD:

Larson & Associates, Inc. Environmental Consultants

DRILL DATE

BORING NUMBER 06-2

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
	1'	Start 13:15								BACKGROUND PID READING SOIL:_____PPM SOIL:_____PPM
	2	Gypsum, Grey, 10YR 6/1 to 6/2, massive, trace silt, by bleach odor				1	.3	3/3	13:20	
	3	"	"			2	.3	2.5/3	13:25	
	4									
	5									
	6									
	7									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: DKA Loc. #141
HOLE DIAMETER: 8.25
LOCATION: Loc
LA GEOLOGIST: DW
DRILLING CONTRACTOR: EOI
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-24-19

BORING NUMBER: 06-3

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING PPM X 2 4 6 8 10 12 14 16 18	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING SOIL: PPM SOIL: PPM
	8									
	9									
	10	Gypsum 10yr, 6/1 to 6/2, hard friable, interbedded w/ sm. quartz sand very fine				3	.25	3/5 10/5		13:30
	.2 .4 .6 .8									
	11									
	12									
	13									
	14									
	15	Gypsum, 10yr, 6/1 to 6/2 hard friable, hydrocarbon odor				4	0	3/5 4/5		
	.2 .4 .6 .8									
	16									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
LABORTORY TEST LOCATION
PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AKA / 06-01111
HOLE DIAMETER: 8.25
LOCATION: ABO
LA GEOLOGIST: DN
DRILLING CONTRACTOR: EDI
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-24-19
BORING NUMBER: 06-3

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING PPM X 2 4 6 8 10 12 14 16 18	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING SOIL: PPM SOIL: PPM
	16									
	17									
	18									
	19									
	20	Gypsum, 10yr, 6/1 10YR hard sand with quartz sand very fine, 7.5YR, 8/4					5	1'	1'/2'	
	21									
	22									
	23									
	24									

- ONE CONTINUOUS AUGER SAMPLER
- STANDARD PENETRATION TEST
- UNDISTURBED SAMPLE
- WATER TABLE (24 HOURS)
- WATER TABLE (TIME of BORING)
- L LABORTORY TEST LOCATION
- \+ PENETROMETER (TONS/SQ. FT.)
- NR NO RECOVERY

JOB NAME/NUMBER: AKA / 06-041
HOLE DIAMETER: 8.25
LOCATION: ADO
LA GEOLOGIST: DN
DRILLING CONTRACTOR: EDI
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-24-19

BORING NUMBER: 06-03

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS: BACKGROUND PID READING (SOIL:_____PPM, SOIL:_____PPM)
	24									
	25	silty clay, grayish brown, 5yr, 3/4				6		0.75'	6.25-6.5	14:00
		TD 20.5								

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AMA / 00-0141
HOLE DIAMETER: 8.25
LOCATION: ADO
LA GEOLOGIST: BN
DRILLING CONTRACTOR: CDS
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-24-19

BORING NUMBER: OC-3

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING PPM X (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	1	Start 8:04								SOIL: PPM SOIL: PPM
	2	Fine grained s+z sand 10yr 6/6 to 5/6 interbedded with gypsum, 10yr, 6/1 to 6/2, hard friable				1		0.5	0.5/5	8:05
	5	Gypsum, 10yr, 6/1 to 6/2, hard friable, massive				2		0.5	5/5	8:15
	9									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AEA / 6-0141
HOLE DIAMETER: 8.25
LOCATION: ABO
LA GEOLOGIST: RW
DRILLING CONTRACTOR: CDJ
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE	BORING NUMBER
7-25-19	06-4

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X; 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
	1'	End 8:30								BACKGROUND PID READING SOIL: PPM SOIL: PPM
	10	gypsum 10yr, 6/1 to 6/2 interbedded with very fine q+z sand 7.5 yr				3	0.5	0.5	10.5	8:25
	15	" " hydrocarbon odor				4	.89	1.25	15.25	8:28
	20	gypsum 10yr, 6/1 to 6/2 hand crack				5	1'	1'	21'	8:30
	21	q+z sand very fine stained, 7.5yr, 5/1 to 5/2, wet								
		TD 21'								

- ☐ ONE CONTINUOUS AUGER SAMPLER
- ☐ STANDARD PENETRATION TEST
- ☐ UNDISTURBED SAMPLE
- ═ WATER TABLE (24 HOURS)
- ═ WATER TABLE (TIME of BORING)
- L LABORTORY TEST LOCATION
- + PENETROMETER (TONS/SQ. FT.)
- NR NO RECOVERY

JOB NAME/NUMBER: AKA / 6-0141
HOLE DIAMETER: 8.25
LOCATION: ABO
LA GEOLOGIST: DN
DRILLING CONTRACTOR: EDI
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-25-19

BORING NUMBER: 06-4

BORING RECORD

Start: 10:00
Finish: 10:23

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	q+2 sand, very fine grained 7.5yr 6/3 to 6/4, hydrocarbon odor				1		2'	0-2'	10:00
	5	Gypsum 10yr 6/1 to 6/2 hard friable				2		1.5	2-3'	10:10
	10	TD 10.25'				3		.5	3-5.5'	10:15
						4		.5	5-8'	10:20
						5		.25	8-10.25'	10:23

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 7-25-19
BORING NUMBER : 03-01

JOB NUMBER : ADA / 6-0141
HOLE DIAMETER : 8:25
LOCATION : ABO
LAI GEOLOGIST : QN
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

EA sump

BORING RECORD

Start: 10:37
Finish: 10:55

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	f+z sand, very fine grained, 7.5 yr, 6/3 to 6/4, hydrocarbon odor				1		2'	1	10:37
		Gypsum, 10 yr, 6/1 to 6/2 hard friable				2		.5"	0	10:40
	5	Gypsum, 10yr, Fibrous, hydrocarbon 6/1 to 6/2 odor, hard friable				3		.25	0	10:45
		Gypsum, 10 yr, 6/1 to 6/2, hard friable				4		.5	0	10:50
	10	TD 10.25				5		.25	0	10:55
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER		WATER TABLE (TIME OF BORING)	
STANDARD PENETRATION TEST	L	LABORATORY TEST LOCATION	
UNDISTURBED SAMPLE	+	PENETROMETER (TONS/ SQ. FT)	
WATER TABLE (24 HRS)	NR	NO RECOVERY	

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 7-25-19

BORING NUMBER : 03-2

JOB NUMBER : AAA16-0141
HOLE DIAMETER : 08:25
LOCATION : ABO
LAI GEOLOGIST : RN
DRILLING CONTRACTOR : EDE
DRILLING METHOD : HSA

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X; 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS: BACKGROUND PID READING (SOIL: PPM; SOIL: PPM)
		Start 12:00 End 12:17								
	2	gr2 sand, 7.5yr 6/3 to 6/4, light brown clay fine grained				1		2'	0'/2'	12:00
		gypsum, 10yr, 6/3 to 6/2, hard friable, wet, hydrocarbon odor				2		1'	1'/3'	12:05
	5	gypsum, 10yr, 6/1 to 6/2, hard friable, interbedded w/ gr2 sand var c.g. 7.5yr 6/3 to 6/4, hydrocarbon odor				3		.5'	3'/4'	12:09 5.5
						4		.25 .25	4'/5'	12:12 8.0
	10	gypsum, 10yr, 6/1 to 6/2, hard friable				5		.25 .25	5'/6'	12:17 10.25
		TD 10.25								

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
\+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: ABAD 6-01411
HOLE DIAMETER: 5 2.5
LOCATION: ABO
LA GEOLOGIST: AW
DRILLING CONTRACTOR: EEC
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-25-19
BORING NUMBER: 03-S

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X ____) 2 4 6 8 10 12 14 16 18	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING SOIL:____PPM SOIL:____PPM
		start 12.55 End 13:20								
	2	qtz sand, very fine grained, 7.5 yl, 6/3 to 6/4 light brown				1		2'	2'/2	12:55
		qtz sand, very fine grained 7.5 yl, 6/3 to 6/4 interbedded with gypsum				2		1.5'	1.5'/4	13:00
	6	qtz sand very fine grained 7.5 yl, 6/3 to 6/4 light brown, hydrocarbon odor				3		2'	2'/7	13:05
		qtz sand 7.5 yl, 6/3 to 6/4, interbedded with gypsum, hydrocarbon odor				4		1.5'	1.5'/9	13:15
		gypsum, 10 yl, 6/1 to 6/2, hard & friable, hydrocarbon odor				5		.3'	10.5	13:20

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
LABORTORY TEST LOCATION
PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AKA - 06-0141
HOLE DIAMETER: 8.25
LOCATION: ABO
LA GEOLOGIST: AW
DRILLING CONTRACTOR: EOI
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-15-19
BORING NUMBER: 03-41

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X; 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS: BACKGROUND PID READING SOIL: PPM SOIL: PPM
		Start 13:35 End 13:50								
	0	qtz sand very fine grained, 7.5yr 1, 6/3 to 6/4 light brown				1		2'	2'/2	13:35
	2	qtz sand very fine grained 5/8				2		1.5	1.5/2	13:40
	3	silty clay, 7.5yr 1, 5/6				3		1.5	1.5/2	13:45
	4	qtz sand very fine grained, 7.5yr 1, 5/4				4		5	.5/2	13:48
	6	qtz sand, very fine grained 7.5yr 1 5/6 interbedded with gypsum				5		1.25	.25/2 10.25	13:50
	8	TD 10.25'								

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AH-06-0191
HOLE DIAMETER: 8.25
LOCATION: ADO
LA GEOLOGIST: KW
DRILLING CONTRACTOR: EDC
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-15-19
BORING NUMBER: 02-1

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X ____ ; 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS: BACKGROUND PID READING (SOIL: ____ PPM; SOIL: ____ PPM)
		Start 14:10 End 14:25								
	5	Eft2 sand, with very fine grained 2.5Y 5/4, interbedded with silty clay and gypsum				1		2'	2/2	14:10
	10	Eft2 sand, with very fine grained 2.5Y 5/3 to 5/4, 15ft+ thick Silty clay, 2.5Y 4/3 to 4/4, interbedded with gypsum and Eft2 sand				2		1.5'	1.5/4	14:15
						3		1.5'	1.5/6.5	14:20
						4		1.5'	1.5/9	14:21
		TD 11.5'				5		1.5'	1.5/11.5	14:25

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AH4 - 06-0141
HOLE DIAMETER: 8 1/4"
LOCATION: AH
LA GEOLOGIST: AN
DRILLING CONTRACTOR: EOI
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-25-19
BORING NUMBER: 02-02

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING PPM X 2 4 6 8 10 12 14 16 18	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING SOIL: PPM SOIL: PPM
		Start 14:40 end 14:58								
		Silty clay, 7.5yr 5/3 to 5/4, interbedded with gypsum (1yr, 6/1, hard crumble)				1		2'	0'/2'	14:40
		Sand clay, 7.5yr 5/3 to 5/4, interbedded with gypsum (1yr, 6/1, hard crumble)				2		1.5	1.5/4'	14:50
		Silty clay, 7.5yr 5/3 to 5/4, interbedded with gypsum				3		1.5	1.5/6'	14:52
						4		1.5	1.5/8'	14:55
		TD 12'				5		2'	0'/10'	14:58

- ☐ ONE CONTINUOUS AUGER SAMPLER
- ☐ STANDARD PENETRATION TEST
- ☐ UNDISTURBED SAMPLE
- ═ WATER TABLE (24 HOURS)
- ═ WATER TABLE (TIME of BORING)
- L LABORTORY TEST LOCATION
- \+ PENETROMETER (TONS/SQ. FT.)
- NR NO RECOVERY

JOB NAME/NUMBER: AHA-06-0141

HOLE DIAMETER: 8.25

LOCATION: [illegible]

LA GEOLOGIST: [illegible]

DRILLING CONTRACTOR: [illegible]

DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-25-19

BORING NUMBER: 02-03

BORING RECORD

GEOLOG UNIT	DEPTH (1"=5')	DESCRIPTION LITHOLOGIC	DESCRIPTION LITHOLOGIC	GRAPHIC LOG	PID READING (PPM X; 2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS: BACKGROUND PID READING
		Start 15:23 End 15:42								SOIL: ____ PPM SOIL: ____ PPM
	5	Silty clay, 7.5YR, 5/4, interbedded with gypsum				1		2'	2/2	15:23
		4" sand 7.5YR 8/4, interbedded with gypsum				2		1.5	1.5/2	15:30
						3		1.5	1.5/2	15:35
		Gypsum, 10YR, 6/2 to 6/3, hard cobble				4		.3	0.5/1	15:37
	10	Silty clay, 7.5YR, 5/4 interbedded with gypsum				5		1'	1/1	15:42
		TD 11'								

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HOURS)
WATER TABLE (TIME of BORING)
L LABORTORY TEST LOCATION
+ PENETROMETER (TONS/SQ. FT.)
NR NO RECOVERY

JOB NAME/NUMBER: AHA - 06-0101
HOLE DIAMETER: 8.25
LOCATION: ABO
LA GEOLOGIST: DW
DRILLING CONTRACTOR: EDI
DRILLING METHOD: HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE: 7-25-19
BORING NUMBER: 08-01

BORING RECORD

Start: 16:00
Finish: 16:15

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	sandy clay, 7.5yr, 4/4 Brown, interbedded with gypsum				1		2'	2' / 2	16:00
		qtz sand, 7.5 yr, 8/4, very fine grained				2		1.5'	1.5' / 4'	16:01
	5	gypsum, 10yr, 6/1 to 6/2 hard friable							8.5	16:05
	6 7					3		0.5	5.5	
	8 9	gypsum, 10yr, 6/1 to 6/2 hard friable, interbedded with qtz sand very fine grained 7.5yr 8/3				4		1'	7/8 5	16:10
	10	gypsum 10yr, 6/1 to 6/2 hard friable				5		.25	.25	16:15
		TD 10.25'							10.25	
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 7-25-19
BORING NUMBER : 05-02

JOB NUMBER : AKA / 06-0411
HOLE DIAMETER : 8.25
LOCATION : ABO
LAI GEOLOGIST : AN
DRILLING CONTRACTOR : EOI
DRILLING METHOD : HSA

BORING RECORD

Start: 7:55
Finish: 8:08

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	sandy clay, 7.5yr, 5/4 interbedded w/ thin gypsum				1		2	2/	7:55
	5	sandy clay, 7.5yr, 6/6				2		1.5	5/	8:00
						3		1	7.5/	8:02
		gypsum, 10yr, 6/1 to 6/2, hard friable				4		5	9.5/	8:05
	10					5		1	10.5	8:08
		TD 10.5								
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : AKA / 06.0141
HOLE DIAMETER : 8.25
LOCATION : ABO
LAI GEOLOGIST : RN
DRILLING CONTRACTOR : EOI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants
DRILL DATE : 7-26-18
BORING NUMBER : 08-03

BORING RECORD

Start: 08:20
Finish: 08:35

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	silty clay, 7.5yr, 4/6 to 5/6 brown				1		2/2	0	8:20
		qtz sand very fine grained, 10yr, 7/6				2		2/2	5	8:23
	5					3		2/2	5	8:27
		gypsum, 10yr, 6/1 to 8/2, hand friable				4		2/2	5.25	8:32
	10					5		2/2	10	8:35
		TD 10.5'							10.5	
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : AKA / 06.0141
HOLE DIAMETER : 8.25
LOCATION : ABO
LAI GEOLOGIST : RN
DRILLING CONTRACTOR : EDD
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants
DRILL DATE : 7-26-19
BORING NUMBER : 08-01

BORING RECORD

Start: 8:55
Finish: 09:10

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty clay, 7.5 yr, 4/6 10 5/6 Bloom				1		0.2	2 / 2	08:50
		Gypsum, 10yr, 6/6 10 dry, hard friable				2		1.5	5 / 5	08:58
	5	Q+Z sand, very fine grained, 6/3 to 6/4				3		1.5	5 / 5	09:00
		Gypsum 10yr 6/2 to 6/3, hard friable				4		1.5	5 / 5	09:05
	10					5		1.5	5 / 5	09:10
		TD 11'				6		1	1 / 1	
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : AKA Pokomo #1
HOLE DIAMETER : 8 2 5
LOCATION : ASO
LAI GEOLOGIST : DM
DRILLING CONTRACTOR : CDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 7-26-21
BORING NUMBER : 07-01

BORING RECORD

Start: 9:25
Finish: 09:40

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
	0	silty clay, 2.5Y, 4/6 to 5/6				1		2'	2	BACKGROUND PID READING SOIL: ____ PPM SOIL: ____ PPM 09:25
		gypsum, 10YR, CM to 6/2, hard & friable				2	0.25	2.5'	2.5	09:28
	5	fine sand, 10YR, CM				3	0.25	2.5'	5	09:31
		gypsum, 10YR, CM to 6/2 hard & friable				4	0.25	2.5'	7.5	09:35
	10	TD 10.25'				5	0.25	2.5'	10.25	09:40
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : AKA 106-0141
HOLE DIAMETER : 8:25
LOCATION : ABO
LAI GEOLOGIST : AN
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 7-26-19
BORING NUMBER : 07-02

BORING RECORD

Start: 09:58
Finish: 10:15

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	gdz sand, fine grained, 7.5yr 7/4				1		1.5'	1'	9:58
		Gypsum 10yr, 8/1 to old hand trouble				2		1.5'	2'	10:02
	5	gdz sand, fine grained, 10yr 7/1, dlg				3		1.5'	6'	10:05
		Gypsum 10yr 8/1 to dz hand trouble				4		1.5'	8'	10:10
	10	TD 10.25'				5		1.5'	10.25'	10:15
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : AHA 106-0141
HOLE DIAMETER : 8.26
LOCATION : ABO
LAI GEOLOGIST : AN
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 7-26-19
BORING NUMBER : 07-03

BORING RECORD

Start: 10:32
Finish: 10:47

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING PPM X	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	sandy clay, 7.5yr, clay to 6.5', firm, brown				1		2'	0	10:32
		f+2 sand, 7.5yr, clay, some gravel				2		1.5'	2	10:37
	5					3		1.5'	4	10:40
		gypsum, 10yr, clay to clay, hard friable				4		0.25'	7.5	10:43
	10					5		1'	11	10:47
		TD 11'								
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : NMA 1606-0141
HOLE DIAMETER : 8.25
LOCATION : ABO
LAI GEOLOGIST : RW
DRILLING CONTRACTOR : CDJ
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants
DRILL DATE : 7-26-19
BORING NUMBER : 07-04

BORING RECORD

Start: 11:00
Finish: 11:11

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty clay, 7.5 yr, 4/6 to 5/6, Blowsn				1		2'	0-2	11:00
		gypsum 10yr, 6/1 to 6/2, Hard Shale								11:04
	5	Silty clay, 7.5 yr, 4/6 to 5/6, Blowsn				2		.5'	3-3.5	
		f+z sand, Lime grained, 7.5 yr 6/3				3		1'	5-6	11:07
		Refusal 7.5'	no recovery							11:11
	10									
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Ake / 22c-01011
HOLE DIAMETER : 8.25
LOCATION : ABO
LAI GEOLOGIST : VN
DRILLING CONTRACTOR : EDT
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 7-26-19
BORING NUMBER : 07-05

BORING RECORD

Start: 11:38
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING PPM X	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	silty clay, 2.5Y, 4/4								SOIL ____ PPM
		sandy clay, 7.5Y, 6/3								SOIL ____ PPM
		Gypsum 10YR, 8/1 to 8/2 hard friable								11:33
	5									11:35
										11:40
		TD 7.5' Refusal (no recovery)								
	10									
	15									
	20									
	25									
	30									
	35									
	40									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : AKA 106.0141
HOLE DIAMETER : 8.25
LOCATION : ABC
LAI GEOLOGIST : MW
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants
DRILL DATE : 7-24-19
BORING NUMBER : 07-06

BORING RECORD

Start: 10:00
Finish: 10:40

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Pink, Very Fine Grade Quartz Sand	CL	
	1.5	Gypsum, Gray to Brown, 10YR, 6/1 to 6/2, Hand, Friable		
	5	TD: 8.5'		
	10			
	15			
	20			
	25			
	30			
	35			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
		0.3	0	SOIL : _____ PPM
1				SOIL : _____ PPM
NR			1.5	10:00
		1	2	
2				
NR			3.5	
		1.80	4	
3				10:03
NR			5.25	
4			6	
NR			6.25	
				10:13
5			8	10:40
			8.5	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : M. Larson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-26-2019

BORING NUMBER : 10-01

BORING RECORD

Start: 11:10
Finish: 11:50

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Pink, Very Fine & Quartz Sand	CL	
	2.5	Gypsum, Gray to Tan, 10YR, 6/1 to 6/2, Hand Friable		
	5			
	7.5	TD: 7'		
	10			
	12.5			
	15			

PID READING: PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1		0.5	2.5	SOIL : _____ PPM
2		1	3	SOIL : _____ PPM
3		0.5	4.5	
4			7	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-26-2019
BORING NUMBER : 10-02

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 12:41
Finish: 13:00

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Pink, Very Fine & Quartz Sand,Gray/Dark, Below Liner @1'	CL	
	2.5	Gypsum, Gray to Tan, 10YR, 6/1 to 6/2, Hand Friable		
	5	TD: 4.5'		
	7.5			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
		1.5	2.5	SOIL : _____ PPM SOIL : _____ PPM
1		0.25	4	2.5
2		0.5	4.5	
3			6	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

LAarson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-25-2019
BORING NUMBER : 10-03

BORING RECORD

GEOLOGIC UNIT	DEPTH	Start: / Finish: DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS
	0	Silty Clay, 7.5YR, 6/2, Pink, Very Fine & Quartz Sand	CL			1		1	1	BACKGROUND PID READING SOIL : ____ PPM SOIL : ____ PPM
									2	
	2.5	Gypsum, Gray to Tan, 10YR, 6/1 to 6/2, Hand Friable				2		0.15	4	Linear found @ 1' and had to move
						3		1	5	
	5	TD: 5'								
	7.5									

PID READING scale: 2 4 6 8 10 12 14 16 18

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-26-2019

BORING NUMBER : 10-04/A

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

GEOLOGIC UNIT	DEPTH	Start: / Finish: DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 7.5YR, 6/2, Pink, Very Fine & Quartz Sand	CL			1		1'	1	SOIL : ____ PPM SOIL : ____ PPM
						NA			2	
	2.5	Gypsum, Gray to Tan, 10YR, 6/2 to 6/1, Hand Friable				2		1'	3	
						NA			4	
	5					3		.5'	4.5	
						NA			6	
	7.5					4		.75'	6.75	
						NA			8	
						5		2'	8.5	Linear sampled above & below 05A
	10	TD: 10'							10	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

LAarson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-26-2019

BORING NUMBER : 10-05

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 8:40
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0			
	2.5	Silty Clay, 7.5YR, 6/2, Pink, Very Fine & Quartz Sand	CL	
	5	Gypsum, Gray to Tan, 10YR, 6/2 to 6/1, Hand Friable		
	7.5	TD: 7.5'		
	10			

PID READING: PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS
1		1'	4	BACKGROUND PID READING
NA			5	SOIL : _____ PPM
2		1'	6	SOIL : _____ PPM
NA			7	
3		0.5'	7.5	
NA			9	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-06

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 9:20
Finish: 9:26

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Gypsum, 10YR, 6/2 to 6/1, Hand Friable				1	NA	.25	5	SOIL : ____ PPM SOIL : ____ PPM
	2.5	TD: 3.25'								
	5									
	7.5									
	10									

PID READING scale: 2 4 6 8 10 12 14 16 18

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-07

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 9:35
Finish: 9:46

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand				1	NA	1.25	2	SOIL : ____ PPM SOIL : ____ PPM
		Gypsum, 10YR, 6/2 to 6/1, Hand Friable				2	NA	1.25	4	
	2.5	TD: 2.25'								
	5									
	7.5									
	10									

PID READING scale: 2 4 6 8 10 12 14 16 18

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-08

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 10:05
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/1 to 6/2, Hand Friable		
		TD: 4.25'		
	5			
	7.5			
	10			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			.25	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			.25	
NA			4	
3			.25	
NA			6	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-09

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 10:30
Finish: 10:36

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
	4.25	TD: 4.25'		
	5			
	7.5			
	10			

PID READING: PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE

NUMBER	PID READING	RECOVERY	DEPTH
1			.25
NA			2
2			3
NA			4
3			.25
NA			6

REMARKS: BACKGROUND PID READING
SOIL : _____ PPM
SOIL : _____ PPM

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019

BORING NUMBER : 10-10

BORING RECORD

Start: 10:45
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
		TD: 3.25'		
	5			
	7.5			
	10			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			1	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			.5	
NA			3	
3			.25	
NA			5	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-11

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 11:20
Finish: 11:35

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING PPM X ____ (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY DEPTH	REMARKS BACKGROUND PID READING SOIL : ____ PPM SOIL : ____ PPM
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand				1		.25	
						NA		2	
	2.5					2		.5	
						NA			
		Gypsum, 10YR, 6/2 to 6/1, Hand Friable				3		.5	
	5					NA		6	
						4		.5	
		TD: 6.5'				NA		8	
	7.5								
	10								

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

LAI Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-12

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 12:49
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING PPM X ____ (2 4 6 8 10 12 14 16 18)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING SOIL : ____ PPM SOIL : ____ PPM
	0	Silty Clay, 7.5YR, 4/2, Very Fine Quartz Sand				1			.5	
						NA			2	
	2.5	Gypsum, 10YR, 6/1, Hand Friable				2			.25	
						NA			3	
						3			4	
		TD: 4'				NA			5	
	5									
	7.5									
	10									

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-13

BORING RECORD

Start: 13:09
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
		TD: 4.25'		
	5			
	7.5			
	10			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			.5	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			.5	
NA			4	
3			.25	
NA				

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

LArson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-14

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 13:30
Finish: 13:44

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
	5	TD: 4.5'		
	7.5			
	10			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			.25	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			.25	
NA			4	
3			.5	
NA			6	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

LAI Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-15

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 14:06
Finish: 14:17

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand				1			.5	SOIL : ____ PPM
						NA			2	SOIL : ____ PPM
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable				2			.5	
						NA			4	
		TD: 4.25'				3			.25	
	5					NA			6	
	7.5									
	10									

PID READING scale: 2 4 6 8 10 12 14 16 18

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019

BORING NUMBER : 10-16

BORING RECORD

Start: 14:35
Finish: 14:44

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 5/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
	5	TD: 4.25'		
	7.5			
	10			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			.5	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			.5	
NA			4	
3			.25	
NA			6	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-17

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 14:57
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 7.5YR, 6/3, Very Fine Quartz Sand				1	NA	.75	2	SOIL : ____ PPM SOIL : ____ PPM
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable				2	NA	.25	4	
	5	TD: 4.5'				3	NA	.5	6	
	7.5									
	10									

PID READING scale: 2 4 6 8 10 12 14 16 18

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019

BORING NUMBER : 10-18

BORING RECORD

Start: 15:24
Finish: 15:28

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/1, Very Fine Quartz Sand		
	2.5	TD: 2.5'		
	5			
	7.5			
	10			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			1	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			.5	
NA			4	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019

BORING NUMBER : 10-19

BORING RECORD

Start: 15:34
Finish: 15:46

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 7.5YR, 6/1 to 6/2, Very Fine Quartz Sand				1			.5	SOIL : ____ PPM SOIL : ____ PPM
						NA			2	
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable				2			3	
						NA			4	
		TD: 4.5'				3			.5	
	5					NA			6	
	7.5									
	10									

PID READING scale: 2 4 6 8 10 12 14 16 18

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019

BORING NUMBER : 10-20

BORING RECORD

Start: 7:57
Finish: 8:10

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand				1		.5	SOIL : ____ PPM
						NA		2	SOIL : ____ PPM
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable				2		.5	
						NA		4	
		TD: 4.25'				3		.25	
	5					NA		.5	
	7.5								
	10								

PID READING scale: 2 4 6 8 10 12 14 16 18

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

LAarson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-27-2019
BORING NUMBER : 10-21

BORING RECORD

Start: 8:14
Finish: 8:22

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2 to 5/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
	5	TD: 5.00'		
	7.5			
	10			

PID READING: PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			1	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			.25	
NA			4	
3			5	
NA			6	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

LAarson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-28-2019
BORING NUMBER : 10-22

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 8:30
Finish: 8:43

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2 to 5/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
		TD: 4.25'		
	5			
	7.5			
	10			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			1	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2		.25		
NA			4	
3		.25		
NA			6	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

LAI Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-28-2019
BORING NUMBER : 10-23

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 9:20
Finish: 9:28

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
		TD: 3'		
	5			
	7.5			
	10			

PID READING: PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			.5	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			3	
NA			4	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-28-2019

BORING NUMBER : 10-25

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

BORING RECORD

Start: 9:35
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG	PID READING (PPM X ____)	SAMPLE NUMBER	SAMPLE PID READING	SAMPLE RECOVERY	SAMPLE DEPTH	REMARKS BACKGROUND PID READING
	0	Silty Clay, 7.5YR, 6/2 to 6/1, Very Fine Quartz Sand				1			.5	SOIL : ____ PPM SOIL : ____ PPM
									2	
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable				NA				
						2			.75	
		TD: 2.75'				NA			4	
	5									
	7.5									
	10									

PID READING scale: 2 4 6 8 10 12 14 16 18

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-28-2019

BORING NUMBER : 10-26

BORING RECORD

Start: 9:48
Finish:

GEOLOGIC UNIT	DEPTH	DESCRIPTION LITHOLOGIC	DESCRIPTION USCS	GRAPHIC LOG
	0	Silty Clay, 7.5YR, 6/2 to 5/2, Very Fine Quartz Sand		
	2.5	Gypsum, 10YR, 6/2 to 6/1, Hand Friable		
	5	TD: 4.5'		
	7.5			
	10			

PID READING — PPM X _____ (2 4 6 8 10 12 14 16 18)

SAMPLE NUMBER	PID READING	RECOVERY	DEPTH	REMARKS: BACKGROUND PID READING
1			.5	SOIL : _____ PPM
NA			2	SOIL : _____ PPM
2			.25	
NA			4	
3			.5	
NA			6	

ONE CONTINUOUS AUGER SAMPLER
STANDARD PENETRATION TEST
UNDISTURBED SAMPLE
WATER TABLE (24 HRS)
WATER TABLE (TIME OF BORING)
L LABORATORY TEST LOCATION
\+ PENETROMETER (TONS/ SQ. FT)
NR NO RECOVERY

Larson & Associates, Inc. Environmental Consultants

DRILL DATE : 06-28-2019
BORING NUMBER : 10-27

JOB NUMBER : Frontier/ 06-0141-11
HOLE DIAMETER : 8.25"
LOCATION : Empire ABO, Lea Co., NM
LAI GEOLOGIST : R. Nelson
DRILLING CONTRACTOR : EDI
DRILLING METHOD : HSA

Appendix C

Photographs

Photographs

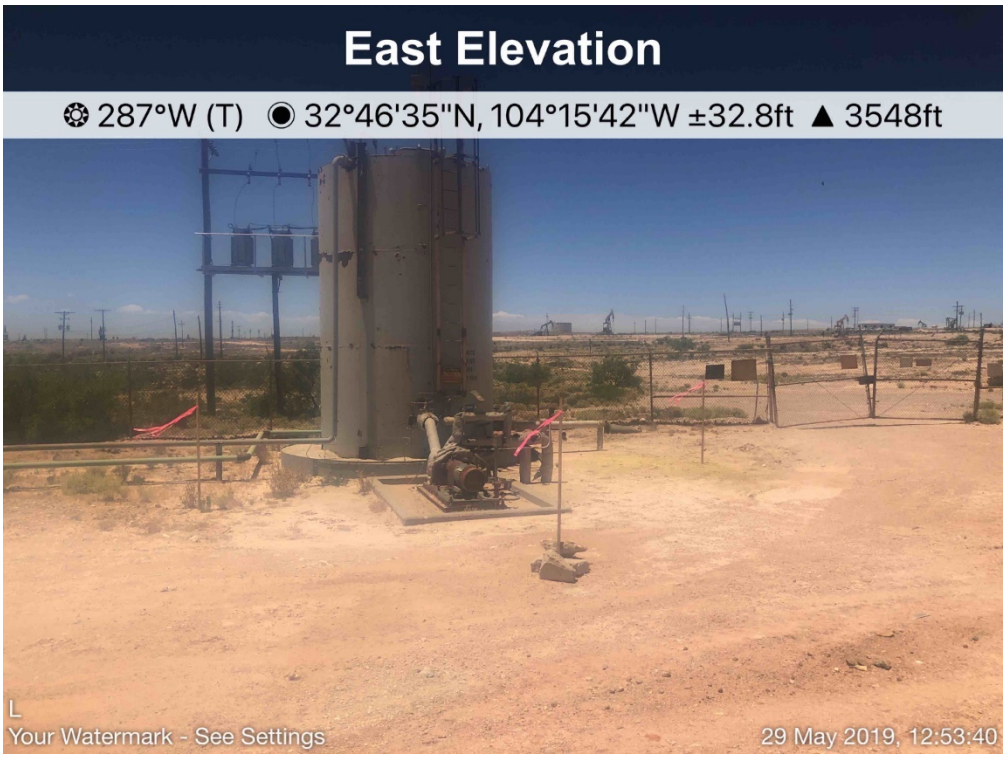


Wastewater Tank Viewing West

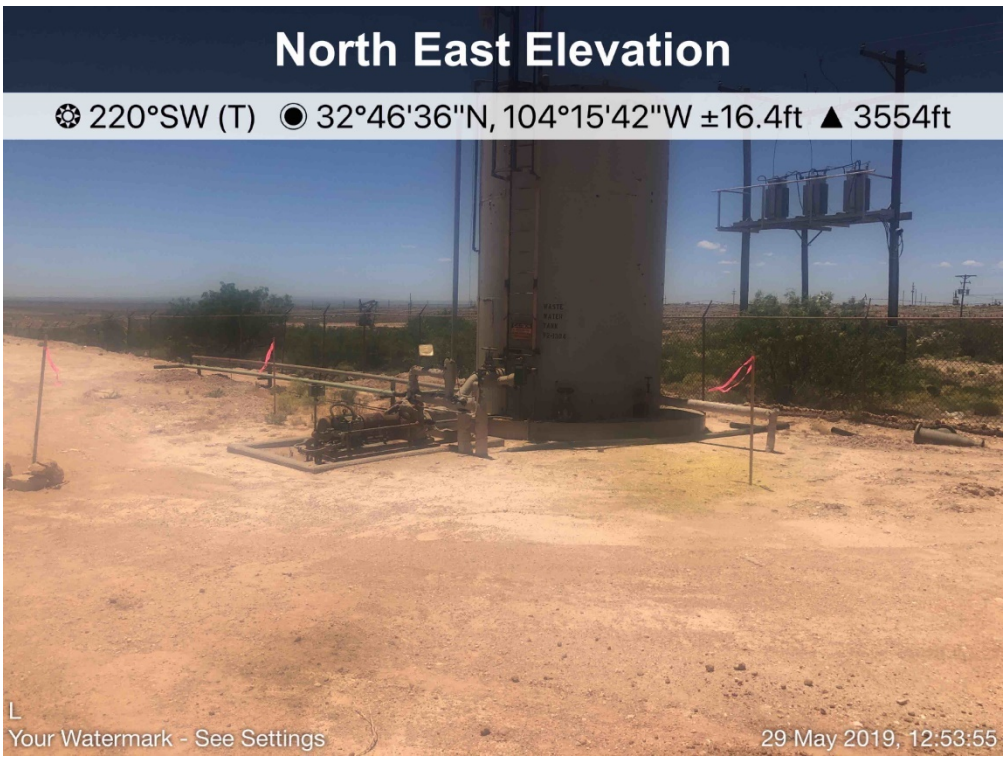


Wastewater Tank Viewing North

Photographs



Wastewater Tank Boring Locations Viewing Northwest



Wastewater Tank Boring Locations Viewing Southwest

Photographs



Amine Sump Viewing South

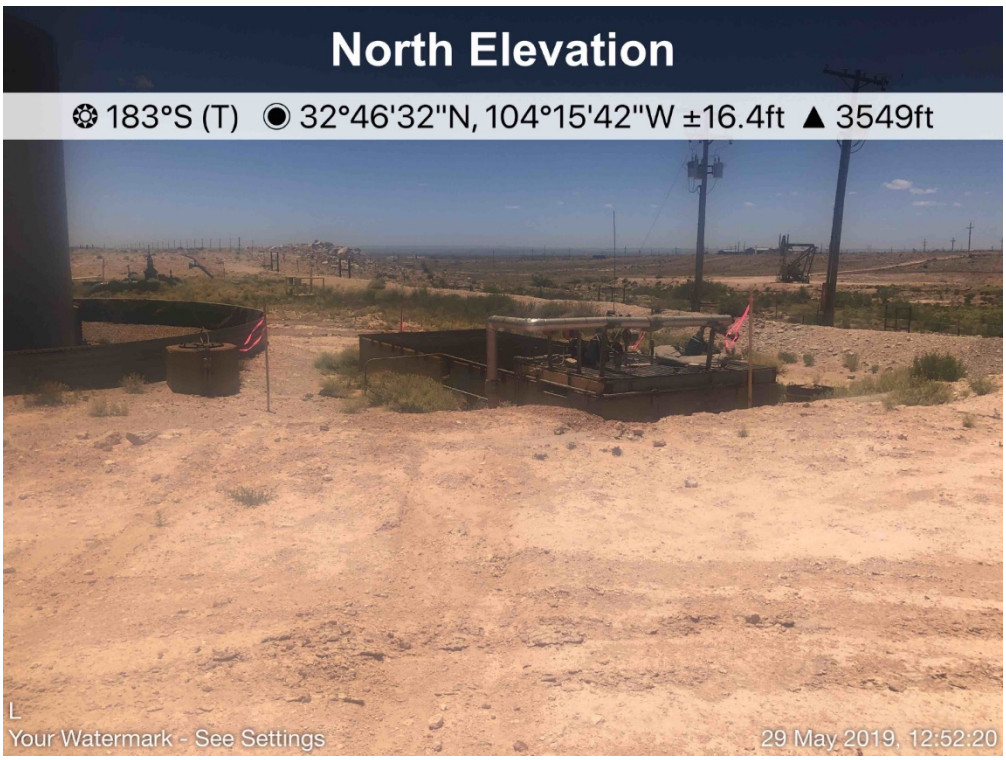


Amine Sump Viewing North

Photographs



Amine Sump Viewing West

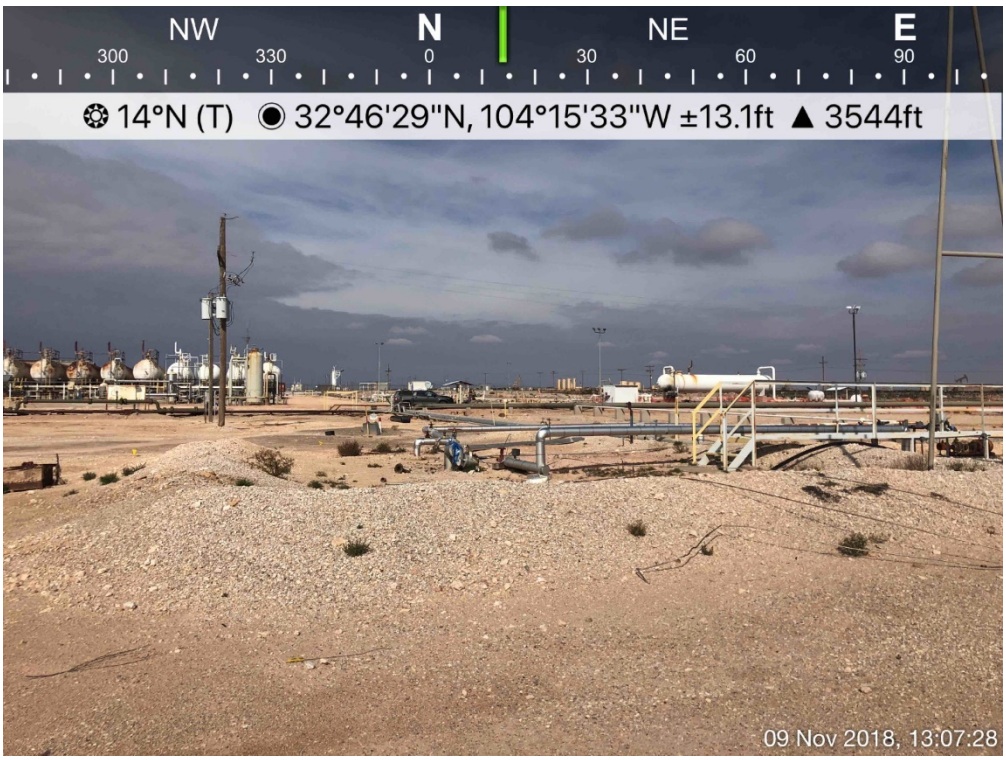


Amine Sump Boring Locations Viewing Southwest

Photographs



Slop Oil Tank Location Viewing East



Slop Oil Tank Location Viewing North

Photographs



Cooling Tower Location Viewing South



Cooling Tower Boring Locations Viewing North

Photographs



Cooling Tower Location Viewing North



Lube Oil Tanks Viewing West

Photographs



Lube Oil Tanks Viewing South

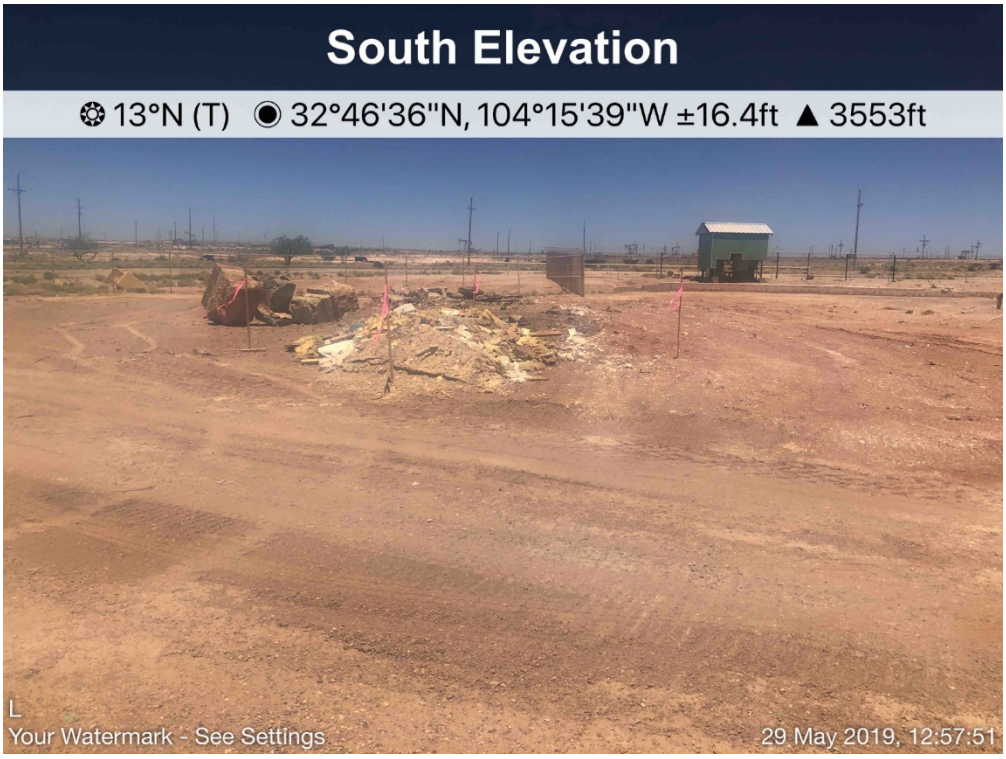


Lube Oil Tanks Viewing East

Photographs



Lube Oil Tanks Viewing North



Lube Oil Tanks Boring Locations Viewing North

Photographs

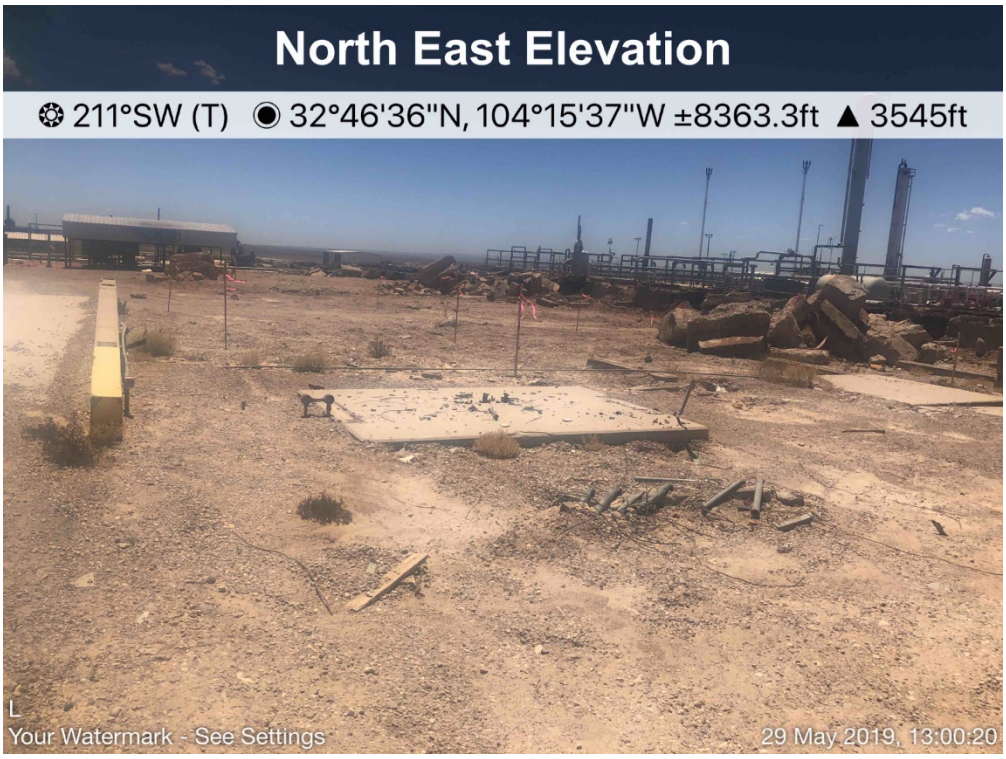


PCB Area Viewing West

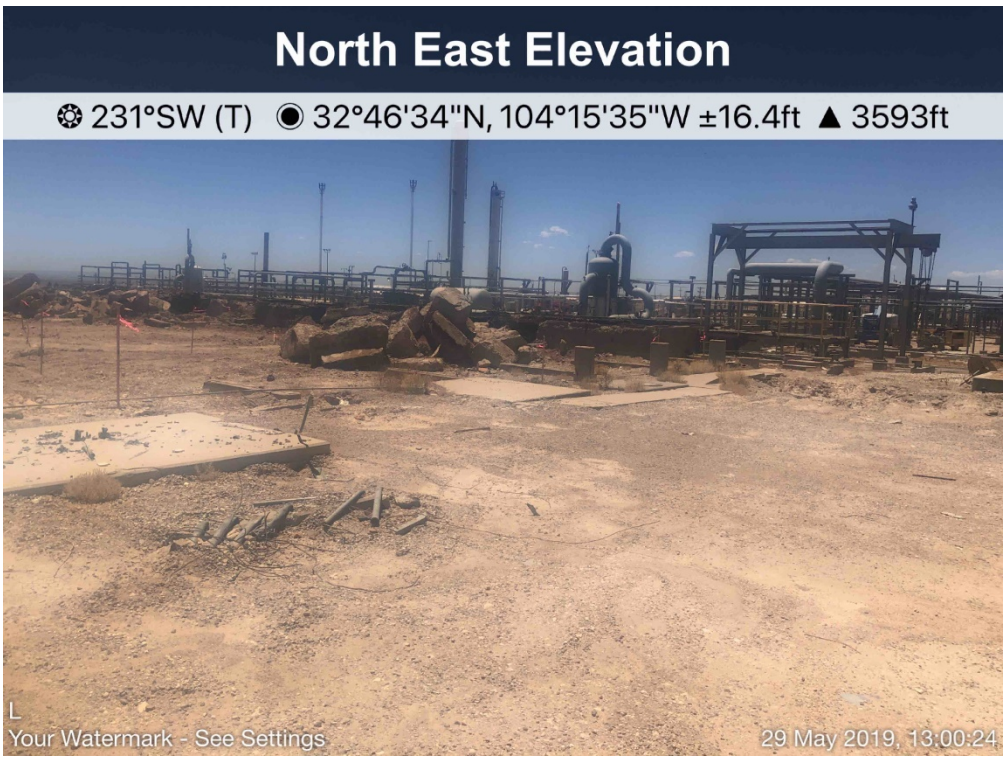


PCB Area Viewing Northwest

Photographs



PCB Area Viewing Southwest



PCB Area Viewing Southwest

Photographs



PCB Area Boring Locations Viewing West



PCB Area Boring Locations Viewing Southwest

Photographs



PCB Area Boring Locations Viewing South



PCB Concrete Area Viewing West

Appendix D

EPA Approval

From: Sales, James
To: Mark Larson
Subject: RE: Final PCB Remediation Plan, Empire Abo Gas Plant, Section 3 (NE/4, SE/4), Township 18 South Range 37 East, Eddy County, New Mexico
Date: Tuesday, February 4, 2020 11:25:46 AM

Hello. I have reviewed your plan and find it acceptable. You may proceed with your project. I didn't see the certification required under 761.61(a)(3)(E).

From: Mark Larson <Mark@laenvironmental.com>
Sent: Friday, January 24, 2020 2:53 PM
To: Sales, James <sales.james@epa.gov>
Cc: 'gstahnke@sugf.com' <gstahnke@sugf.com>
Subject: Re: Final PCB Remediation Plan, Empire Abo Gas Plant, Section 3 (NE/4, SE/4), Township 18 South Range 37 East, Eddy County, New Mexico

Dear Mr. Sales,
Larson & Associates, Inc., submits this final PCB remediation plan to EPA Region 6 on behalf of AKA Energy Group, LLC, a wholly owned subsidiary of Southern Ute Indian Tribe Growth Fund (SUGF) and former owner of the Empire Abo Gas Plant (Facility) located in Eddy County, New Mexico. If you have any questions or require additional information please contact Mr. Graham Stahnke with Aka Energy Group, LLC at (970) 759-5712 or email gstahnke@sugf.com or me using contact information below.
Respectfully,

Mark J. Larson, P.G.
President/Sr. Hydrogeologist
507 N. Marienfeld St., Suite 202
Midland, Texas 79701
Office – 432-687-0901
Cell – 432- 556-8656
Fax – 432-687-0456
mark@laenvironmental.com

Larson & Associates, Inc.
Environmental Consultants

"Serving the Permian Basin Since 2000"

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1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 203529

CONDITIONS

Operator: Aka Energy Group, LLC 125 Mercado St, Suite 201 Durango, CO 80301	OGRID: 330743
	Action Number: 203529
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. See app ID 145697 for most updated status.	4/3/2023