June 2,

2020

Quarterly (2nd) Groundwater Monitoring Report (April 1 - June 2020)
3 Bear Energy Services, LLC, Cottonwood Facility (2RF-128)
Eddy County, New Mexico

Prepared for:

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Table of Contents

List of Tables

List of Figures

List of Appendices

1.0 EXECUTIVE SUMMARY

Larson & Associates, Inc. (LAI) submits this report to the New Mexico Oil Conservation Division (OCD) on behalf of 3 Bear Energy Services, LLC (3 Bear) to report the results of 2020 second (2nd) quarter (April – June) groundwater monitoring at the Cottonwood Facility (Site). The Site is in Unit N (SE/4, SW/4), Section 20, Township 20 South, and Range 26 East in Eddy County, New Mexico. The geodetic position is North 32.0210483° and West -104.31879°. The surface and mineral owner is the U.S. Government administered by the Bureau of Land Management (BLM).

The following activities occurred on May 7, 2020:

- Gauge four (4) monitoring wells MW-1 through MW-4) for light non-aqueous phase liquid (LNAPL) and depth to groundwater.
- Purge and sample groundwater from four (4) wells (MW-1 through MW-4) utilizing the low stress (low flow) method.
- Analyze samples for benzene, toluene, ethylbenzene, xylenes (BTEX), total petroleum hydrocarbons (TPH) and chloride.

The following observations are documented in this report:

- Depth to groundwater ranged from 28.96 feet below ground surface (bgs) at MW-1 to 69.22 feet bgs at MW-4.
- Depth to groundwater increased in all wells between 0.22 feet (MW-1) and 4.20 feet (MW-2) which principally due to aquifer response to decreased recharge and/or pumping from wells.
- The groundwater potentiometric surface elevation ranged from 3,431.33 feet above mean sea level (MSL) at MW-1 (up gradient) to 3,386.84 feet above MSL at MW-4 (down gradient).
- An apparent hydrologic divide near well MW-1 causes groundwater to flow northeast east towards MW-2 and MW-3 and to the southeast towards MW-4 at gradients between 0.03 and 0.19 feet per foot.
- BTEX and TPH were not reported above the analytical method reporting limit (RL) in all samples.
- Chloride was below the New Mexico Water Quality Control Commission (WQCC) domestic water quality standard of 250 milligrams per liter (mg/L) in samples from monitoring wells MW-1 and MW-2, which is consistent with previous monitoring periods.
- Chloride in well MW-3 increased from 120 mg/L (February 18, 2020) to 305 mg/L (May 7, 2020) and exceeds the WQCC domestic water quality standard (250 mg/L).
- Chloride exceeded the WQCC domestic water quality standard (250 mg/L) in the sample from MW-4 (25,400 mg/L), which is consistent with the previous monitoring periods.

Conclusions

The source for chloride in well MW-3 is not immediately known, 3 Bear has found no leakage from the pit from daily leak detection system inspections. LAI reviewed its sampling and decontamination procedures and found that well MW-2 was sampled after well MW-4 and the chloride concentration in well MW-2 was consistent with previous monitoring period indicating that decontamination protocols were followed. It is possible that the chloride could have been carried over from well MW-4 which should be the last well gauged and sampled due to elevated chloride in well MW-4. The source for chloride in well MW-4 is due to naturally accruing condition since 3 Bear does not have oil and gas production and has found no leakage from the pit from daily leak detection system inspections.

3 Bear will continue monitor the leak detection system and immediately report any changes to the OCD. 3 Bear will also continue monitoring groundwater on a quarterly (4 times per year) schedule. Monitoring well gauging and groundwater sample collection will be in the order of monitoring well MW-1, MW-2, MW-3, and MW-4. Notification will be provided to the OCD at least 7 working days prior to each monitoring event, and as soon as possible upon any significant change in analyte concentrations.

2.0 INTRODUCTION

Larson & Associates, Inc. (LAI) submits this report to the New Mexico Oil Conservation Division (OCD) on behalf of 3 Bear Energy Services LLC (3 Bear) to present the quarterly (4 times per year) groundwater monitoring results from four (4) monitoring wells (MW-1, MW-2, MW-3 and MW-4) at the Cottonwood Facility (Site) in Eddy County, New Mexico. This report is for groundwater samples collected for the second (2nd) quarter on May 7, 2020. The Site is in Unit N (SE 1/4, SW 1/4), Section 20, Township 26 South, and Range 26 East, in Eddy County, New Mexico. The surface and mineral owner is the U.S. Government administered by the Bureau of Land Management (BLM). The geodetic position is North 32.02104833° and West -104.318793°. Figure 1 presents a location and topographic map. Figure 2 presents an aerial map.

3.0 GROUNDWATER POTENTIONMETRIC SURFACE ELEVATION

On May 7, 2020, LAI personnel gauged monitoring wells MW-1 through MW-4 for light non-aqueous phase liquid (LNAPL) and depth to groundwater. LNAPL was not present in the monitoring wells. Groundwater was gauged in wells MW-1, MW-2, MW-3, and MW-4 at 31.72, 49.30, 45.68 and 72.20 feet below top of casing (TOC), respectively. Depth to groundwater increased between 0.22 feet (MW-1) and 4.20 feet (MW-2) compared to the previous monitoring period and may be attributed to aquifer response for decreased recharge and/or pumping from wells.

The groundwater potentiometric surface elevation ranged from 3,431.33 feet above mean sea level (MSL) at well MW-1 (up gradient) 3,386.84 feet above MSL at MW-4 (down gradient). An apparent groundwater divide occurs in the area between monitoring well MW-1 that causes groundwater to flow to the northeast towards wells MW-2 and MW-3 and southeast towards well MW-4 at gradients between 0.03 and 0.19 feet per foot. Figure 3 presents the groundwater potentiometric map for May 7, 2020.

4.0 GROUNDWATER SAMPLES AND ANALYSIS

On May 7, 2020, LAI personnel collected groundwater samples from wells MW-1 through MW-4 using the low stress or low flow method, according to EPA protocol (EQASOP-GW4, Revision 4, September 19, 2017) where an environmental pump is submerged near the middle of the water column and the well is pumped at a low rate until environmental parameters stabilize. Groundwater samples were collected from the discharge of the dedicated disposable Tygon tubing. The tubing was discarded after each use and the pump was thoroughly cleaned with a solution potable water and laboratory grade detergent (Alconox®) and rinsed with distilled water. The samples were carefully transferred to laboratory containers that were labeled, sealed with custody labels, packed in an ice filled chest and delivered under chain of custody control to DHL Analytical, Inc. (DHL), a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory, located in Round Rock, Texas. A duplicate sample was collected from well MW-1 for laboratory quality assurance and quality control (QA/QC). DHL analyzed the samples for benzene, toluene, ethylbenzene, xylene (BTEX) according to EPA SW-846 Method SW-8021B and total petroleum hydrocarbons (TPH) according to EPA SW-846 Method 8015M including gasoline range organics (C6 to C12), diesel range organics (>C12 to C28) and oil range organics (>C28 to C35) and chloride by EPA Method 300. Table 2 presents the laboratory analytical data summary. Appendix A presents the laboratory report.

4.1 Organic Analysis

BTEX and TPH were not detected at concentrations above the analytical method reporting limits (RL) in MW-1, MW-2, MW-3, and MW-4. No data quality exceptions were noted in the DHL case narratives.

4.2 Inorganic Analysis

Chloride ranged from 121 milligrams per liter (mg/L) in monitoring well MW-2 to 25,400 mg/L in monitoring well MW-4. The chloride concentrations in samples from wells MW-1 and MW-2 were below the New Mexico Water Quality Control Commission (WQCC) domestic water quality standard of 250 milligrams per liter (mg/L). The chloride concentration in well MW-3 increased from 120 mg/L (February 18, 2020) to 305 mg/L (May 7, 2020) and exceeds the WQCC domestic water quality standard (250 mg/L). Chloride in well MW-3 increased from 120 mg/L (February 18, 2020) to 305 mg/L (May 7, 2020) and exceeds the WQCC domestic water quality standard (250 mg/L). The source for chloride in well MW-3 is not immediately known and 3 Bear has found no leakage from the pit from daily leak detection system inspections. LAI reviewed its sampling and decontamination procedures and found that it is possible the chloride could have been carried over from well MW-4 which was sampled prior to sampling wells MW-2 and MW-3 and should have been the last well gauged and sampled due to elevated chloride in well MW-4. The chloride concentration in sample MW-4 (25,400 mg/L) exceeded the WQCC domestic water quality standard (250 mg/L) and suspected as naturally occurring since 3 Bear does not have oil and gas production and has found no leakage from the pit from daily leak detection system inspections. The duplicate (QA/QC) sample from monitoring well MW-1 was consistent with the original sample confirming no laboratory QA/QC issues. Figure 4 presents a map showing chloride concentrations in groundwater on May 7, 2020.

On January 29, 2019 and May 15, 2019, the laboratory analyzed a layer of naturally occurring salts that formed as a precipitate in samples from monitoring well MW-4. The laboratory reported chloride in the precipitate at 87,700 mg/L and 25,900 mg/L, on January 29, 2019 and May 15, 2019, respectively. The precipitate is considered as naturally occurring and contributes to the elevated chloride reported in the groundwater samples. No data quality exceptions were noted in the DHL case narratives for chloride.

5.0 CONCLUSIONS

The following observations are documented in this report:

- A hydrologic divide in the vicinity of monitoring well MW-1 causes groundwater to flow to the northeast to southeast at gradients between 0.03 and 0.19 feet per foot.
- BTEX and TPH were below the RL in all samples.
- Chloride was below the WQCC domestic water quality standard of 250 mg/L in samples from monitoring wells MW-1 and MW-2, which is consistent with previous monitoring periods.
- Chloride in well MW-3 increased from 120 mg/L (February 18, 2020) to 305 mg/L (May 7, 2020) and may be the result of possible cross contamination due to well MW-4 with the highest chloride concentration (25,400 mg/L) being gauged and samples prior to gauging and sampling wells MW-2 and MW-3.
- Chloride in well MW-4 (25,400 mg/L) is considered naturally occurring and unrelated to 3 Bear operations.

6.0 RECOMMENDATIONS

3 Bear will continue daily leak detection system inspections and quarterly (4 times per year) groundwater monitoring. LAI will modify sampling protocol by gauging and sampling wells in the

following order: MW-1, MW-2, MW-3, and MW-4. Notification will be provided to the OCD at least 7 working days prior to each monitoring event, and as soon as possible upon any significant change in analyte concentrations.

Tables

Table 1
Monitoring Well Completion and Gauging Summary
3 Bear Energy, LLC, Eddy County, New Mexico

Well Information									Groundwater Data				
Well No.	Date Drilled	Well Depth (Feet TOC)	Drilled Depth (Feet BGS)	Well Diameter (inches)	Surface Elevation (Feet AMSL)	Screen Interval (Feet BGS)	Casing Stickup (Feet)	TOC Elevation (Feet AMSL)	Date Gauged	Depth to Water (feet TOC)	Depth to Water (feet BGS)	Water Column Height (feet)	Groundwater Elevation (feet AMSL)
MW-1	8/15/2018	92.40	89.40	2	3,460.29	74.40 - 89.40	2.76	3,463.05	9/25/2018	31.85	29.09	60.55	3,431.20
									11/13/2018	31.81	29.05	60.59	3,431.24
									12/12/2018	31.69	28.93	60.71	3,431.36
									01/29/2019	32.62	29.86	59.78	3,430.43
									5/15/2019	32.50	29.74	59.90	3,430.55
									9/12/2019	31.51	28.75	60.89	3,431.54
									9/20/2019	32.40	29.64	60.00	3,430.65
									12/4/2019	31.73	28.97	60.67	3,431.32
									2/18/2020	31.50	28.74	60.90	3,431.55
									5/7/2020	31.72	28.96	60.68	3,431.33
MW-2	08/16/2018	58.70	61.70	2	3,455.22	40.70 - 55.70	3.04	3,458.26	09/25/2018	Dry			
									11/13/2018	Dry			
									12/12/2018	42.52	39.48	16.18	3,415.74
									01/29/2019	42.07	39.03	16.63	3,416.19
									5/15/2019	42.70	39.66	16.00	3,415.56
									9/12/2019	43.98	40.94	14.72	3,414.28
									9/20/2019	44.78	41.74	13.92	3,413.48
									12/4/2019	45.01	41.97	13.69	3,413.25
									2/18/2020	45.10	42.06	13.60	3,413.16
									5/7/2020	49.30	46.26	9.40	3,408.96
MW-3	08/16/2018	52.90	49.90	2	3,455.52	34.90 - 49.90	3.00	3,458.33	09/25/2018	43.55	40.55	9.35	3,414.78
									11/13/2018	42.65	39.65	10.25	3,415.68
									12/12/2018	42.16	39.16	10.74	3,416.17
									01/29/2019	41.85	38.85	11.05	3,416.48
									5/15/2019	42.61	39.61	10.29	3,415.72
									9/12/2019	44.30	41.30	8.60	3,414.03
									9/20/2019	44.10	41.10	8.80	3,412.23
									12/4/2019	44.83	41.83	8.07	3,413.50
									2/18/2020	45.60	42.60	7.30	3,412.73
									5/7/2020	45.68	42.68	7.22	3,412.65
MW-4	08/14/2018	78.10	75.10	2	3,456.06	60.10 - 75.00	2.98	3,459.04	09/25/2018	Dry			
									11/13/2018	Dry			
									12/12/2018	74.36	71.38	3.74	3,384.68

Table 1
Monitoring Well Completion and Gauging Summary
3 Bear Energy, LLC, Eddy County, New Mexico

Well Information									Groundwater Data				
Well No.	Date Drilled	Well Depth (Feet TOC)	Drilled Depth (Feet BGS)	Well Diameter (inches)	Surface Elevation (Feet AMSL)	Screen Interval (Feet BGS)	Casing Stickup (Feet)	TOC Elevation (Feet AMSL)	Date Gauged	Depth to Water (feet TOC)	Depth to Water (feet BGS)	Water Column Height (feet)	Groundwater Elevation (feet AMSL)
									01/29/2019	71.34	68.36	6.76	3,387.70
									5/15/2019	71.50	68.52	6.60	3,387.54
									9/12/2019	67.38	64.40	10.72	3,391.66
									9/20/2019	71.41	68.43	6.69	3,387.63
									12/4/2019	66.31	63.33	11.79	3,392.73
									2/18/2020	71.80	68.82	6.30	3,387.24
									5/7/2020	72.20	69.22	5.90	3,386.84

Notes: monitoring wells installed by Environ-Drill, Albuquerque, New Mexico with 2 inch schedule 40 PVC casing and screen
bgs - below ground surface
TOC - top of casing
AMSL: denotes elevation in feet above mean sea level

Table 2
GroundwaterSample Organic and Inorganic Analytical Data Summary
3Bears Cottonwood Facility
Eddy County, New Mexico

Well No.	Collection Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	C6 -C12 (mg/L)	>C12-C28 (mg/L)	>C28-C35 (mg/L)	C6-C35 (mg/L)	Chloride (mg/L)
WQCC Standard:		***0.01**	***0.75**	***0.75**	***0.62**	**--**	**--**	**--**	**--**	****250**
MW-1	9/25/2018	<0.000800	<0.00200	<0.00200	<0.00200	<0.556	<0.556	<0.556	<0.556	210
	11/13/2018	0.00124	<0.00200	<0.00200	<0.00200	<0.527	<0.527	<0.527	<0.527	1,220
	12/12/2018	0.00130	<0.00200	<0.00200	<0.00200	<0.537	<0.537	<0.537	<0.537	677
	1/29/2019	0.00489	<0.00400	<0.00400	<0.00400	<0.0600	<0.0789	<0.0789	<0.2178	1,750
	5/15/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0749	<0.0749	<0.7498	214
	9/20/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0730	<0.0730	<0.206	248
	12/4/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0739	<0.0739	<0.2078	224
	2/18/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0772	<0.0772	<0.2144	214
	5/7/2020	<0.00800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0787	<0.0787	<0.2174	246
MW-2	9/25/2018					Dry				
	11/13/2018					Dry				
	1/29/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0767	<0.0767	<0.0767	136
	5/15/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0744	<0.0744	<0.2088	106
	9/20/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0748	<0.0748	<0.2096	117
	12/4/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0751	<0.0751	<0.2102	105
	2/18/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0766	<0.0766	<0.2132	120
	5/7/2020	<0.00800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0823	<0.0823	<0.2246	121
MW-3	9/25/2018	<0.000800	<0.00200	<0.00200	<0.00200	<0.554	<0.554	<0.554	<0.554	101
	11/13/2018	<0.000800	<0.00200	<0.00200	<0.00200	<0.574	<0.574	<0.574	<0.574	103
	1/29/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0780	<0.0780	<0.0780	140
	5/15/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0758	<0.0758	<0.2116	121
	9/20/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0737	<0.0737	<0.2074	130
	12/4/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0752	<0.0752	<0.2104	111
	2/18/2020	<0.00800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0794	<0.0794	<0.2188	120
	5/7/2020	<0.00800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0997	<0.0997	<0.2594	305

Table 2
GroundwaterSample Organic and Inorganic Analytical Data Summary
3Bears Cottonwood Facility
Eddy County, New Mexico

Well No.	Collection Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	C6 -C12 (mg/L)	>C12-C28 (mg/L)	>C28-C35 (mg/L)	C6-C35 (mg/L)	Chloride (mg/L)
WQCC Standard:		***0.01**	***0.75**	***0.75**	***0.62**	**--**	**--**	**--**	**--**	****250**
MW-4	9/25/2018					Dry				
	11/13/2018					Dry				
	1/29/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	0.216	<0.110	**0.216**	22,300
	5/15/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.762	<0.762	<0.2114	22,900
	9/20/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.741	<0.741	<0.082	26,000
	12/4/2019	<0.000800	<0.00200	<0.00200	<0.00200	<0.600	<0.752	<0.752	<2.104	24,400
	2/18/2020	<0.00800	<0.0200	<0.0200	<0.0200	<0.600	<0.577	<0.577	<1.754	25,800
	5/7/2020	<0.00800	<0.0200	<0.0200	<0.0200	<0.600	<0.110	<0.110	<0.820	25,400
	QA/QC (Duplicate) Samples									
Dup - 1	2/18/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0802	<0.0802	<0.2204	210
(MW-1)	5/7/2020	<0.000800	<0.00200	<0.00200	<0.00200	<0.0600	<0.0800	<0.0800	<0.2200	221
	Precipitate									
Well No.	**Collection Date**	**Barium (mg/L)**	**Calcium (mg/L)**	**Iron (mg/L)**	**Magnesium (mg/L)**	**Potassium (mg/L)**	**Sodium (mg/L)**	**Strontium (mg/L)**		
MW-4	1/29/2019	<0.463	347	46.9	20,500	894	87,700	8.87		
	5/15/2019	--	333	--	50,500	2,370	25,900	--		

Notes: Analysis performed by DHL Analytical, Round Rock, Texas, by EPA SW-846 Method 8021B (BTEX), Method 8015M (TPH) and Method 300 (chloride)
All values reported in milligrams per liter (mg/L) equivelent to parts per million (ppm)
-- No data vailable
< values - denootes concentration is less than method reporting limit (RL).
* - Human health standard
** - Domestic water quality standard

Table 2
GroundwaterSample Organic and Inorganic Analytical Data Summary
3Bears Cottonwood Facility
Eddy County, New Mexico

Well No.	Collection Date	Benzene (mg/L)	Ethylbenzene (mg/L)	Toluene (mg/L)	Xylenes (mg/L)	C6 -C12 (mg/L)	>C12-C28 (mg/L)	>C28-C35 (mg/L)	C6-C35 (mg/L)	Chloride (mg/L)
WQCC Standard:		***0.01**	***0.75**	***0.75**	***0.62**	**--**	**--**	**--**	**--**	****250**

Alkalinity										
Well No.	**Collection Date Date**	**Bicarbonate mg/L**	**Carbonate mg/L**	**Hydroxide mg/L**	**Total mg/L**					
MW-4	1/29/2019	--	--	--	--					
	5/15/2019	5140	<	<	5140					
MW-2	5/15/2019	116	<	<	116					
MW-3	5/15/2019	202	<	<	202					
MW-1	5/15/2019	72.7	<	<	72.7					

Figures

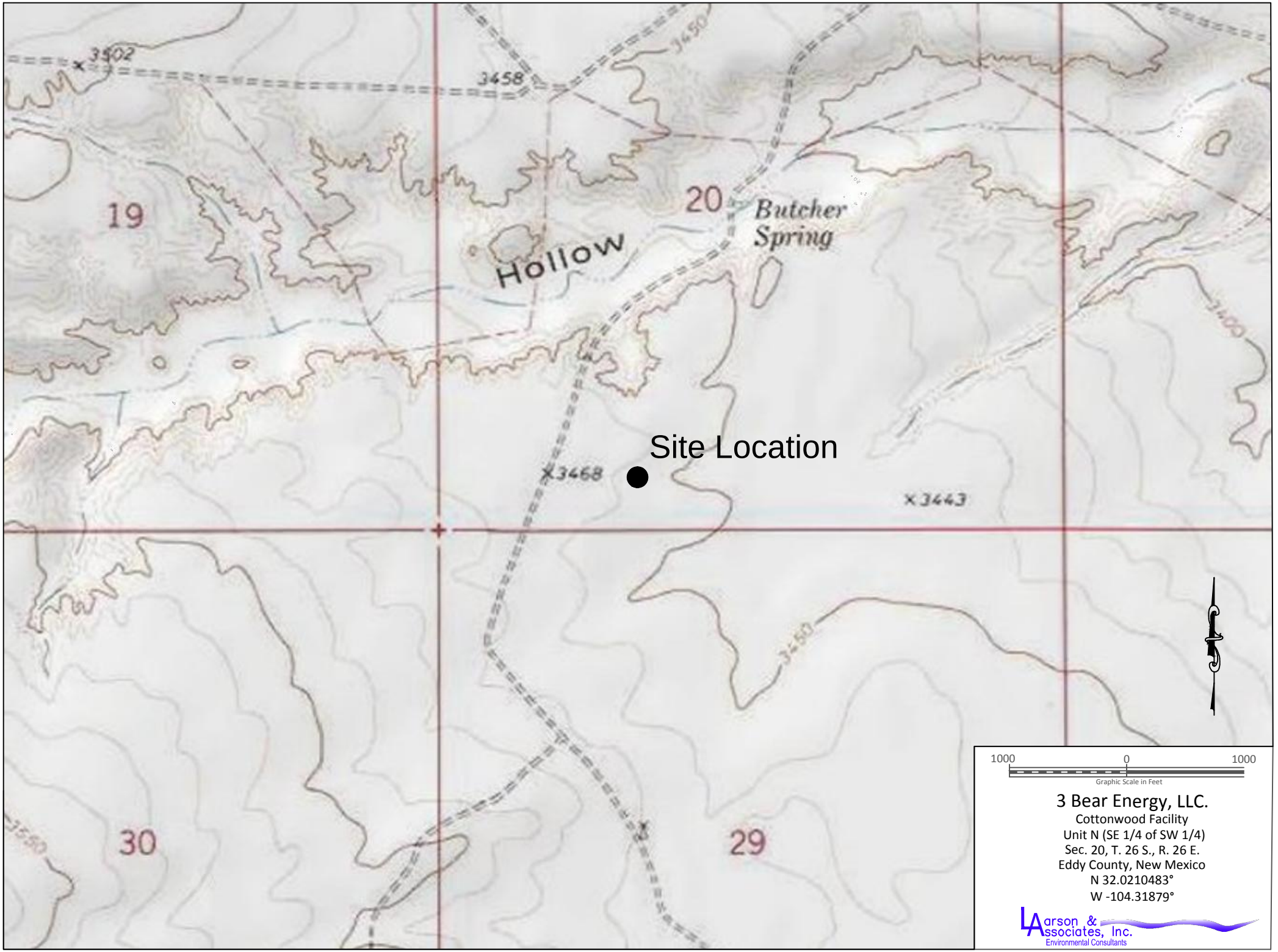


Figure 1 - Topographic Map

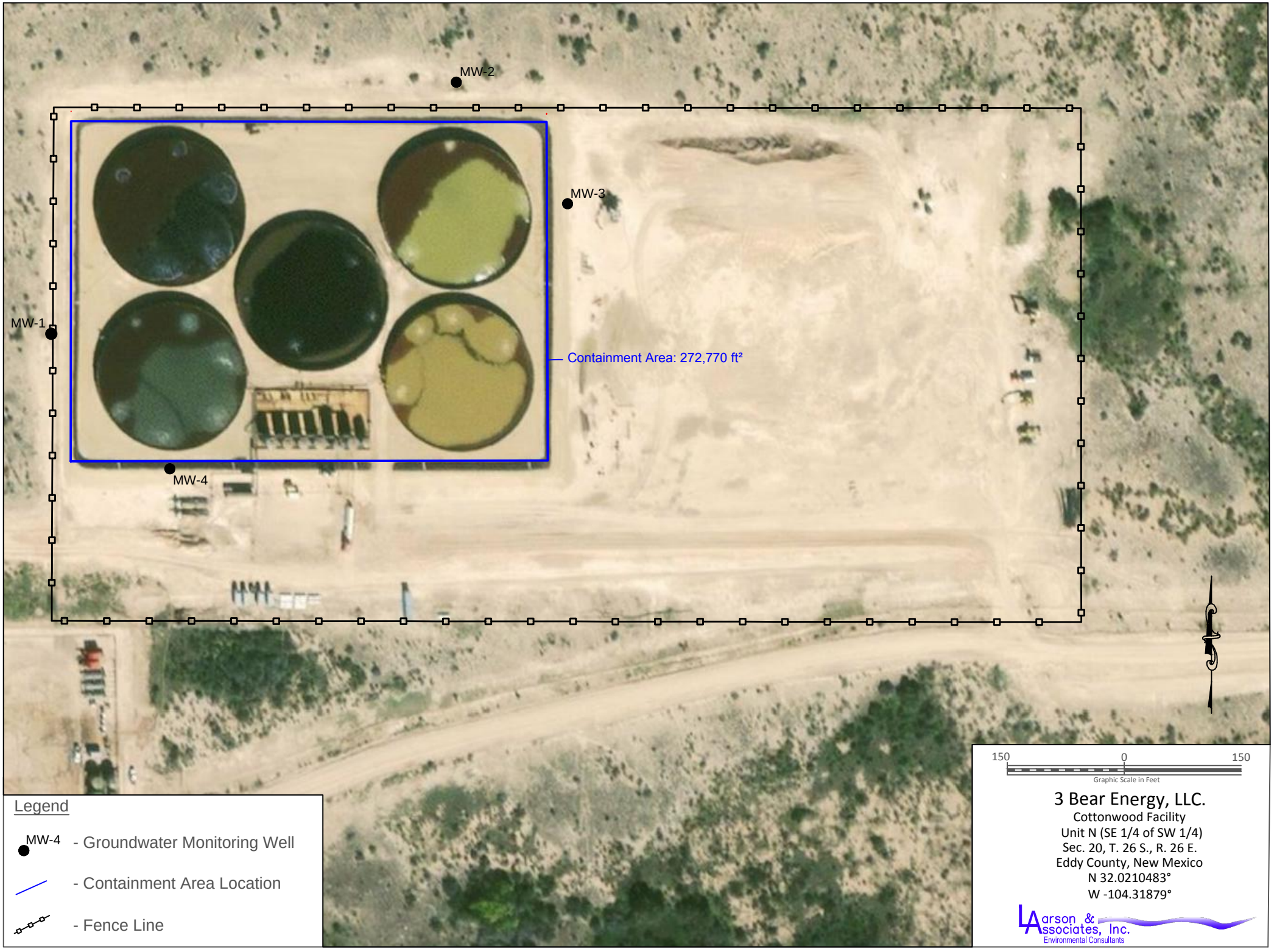
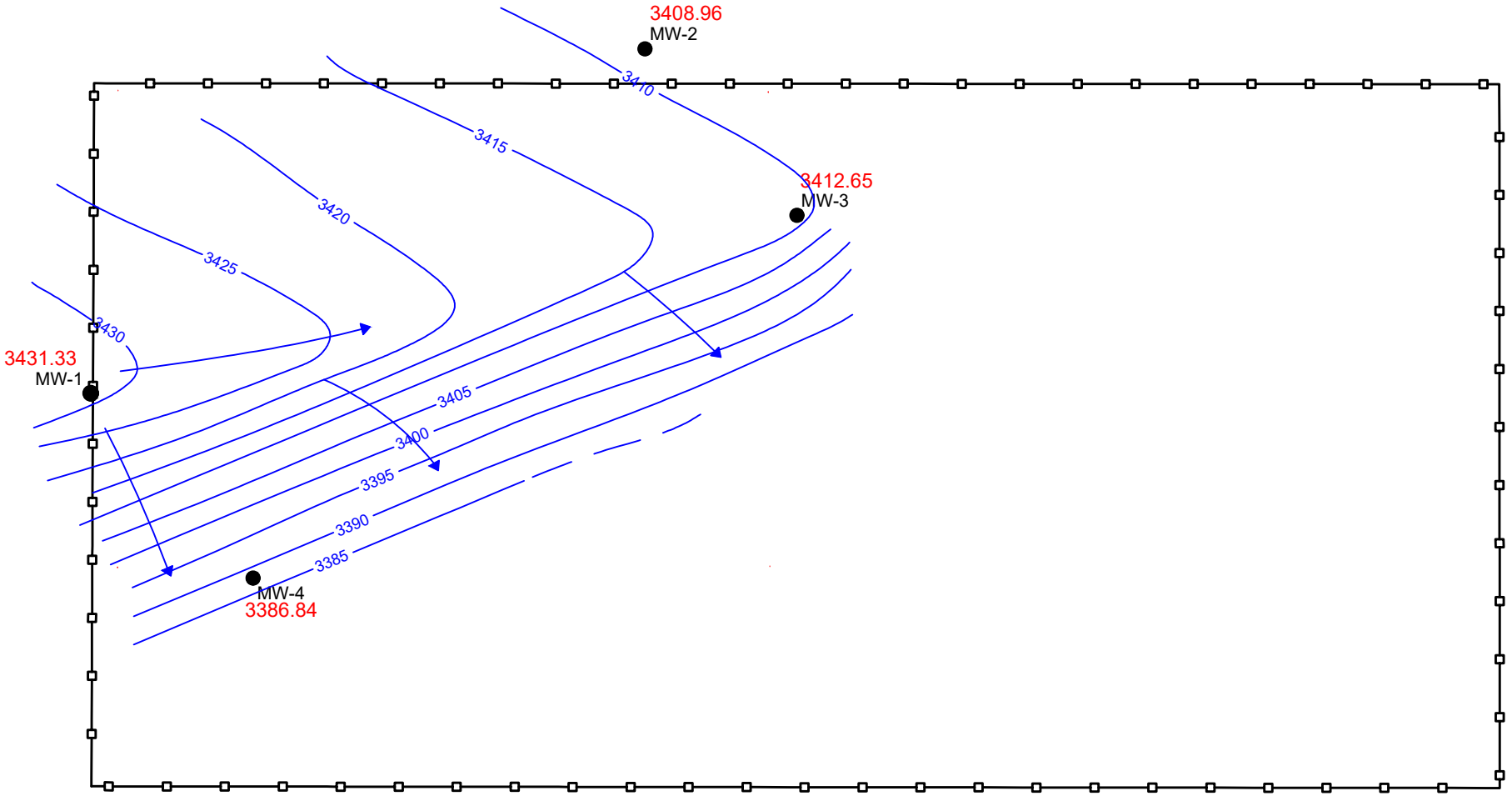


Figure 2 - Aerial Map



Legend

3386.84 MW-4 - Monitoring Well Location and Groundwater Potentiometric Surface Elevation, Feet AMSL, May 7, 2020

3420 - Contour of Groundwater Potentiometric Surface Elevation, Feet AMSL, May 7, 2020

- Groundwater Flow Direction

- Fence

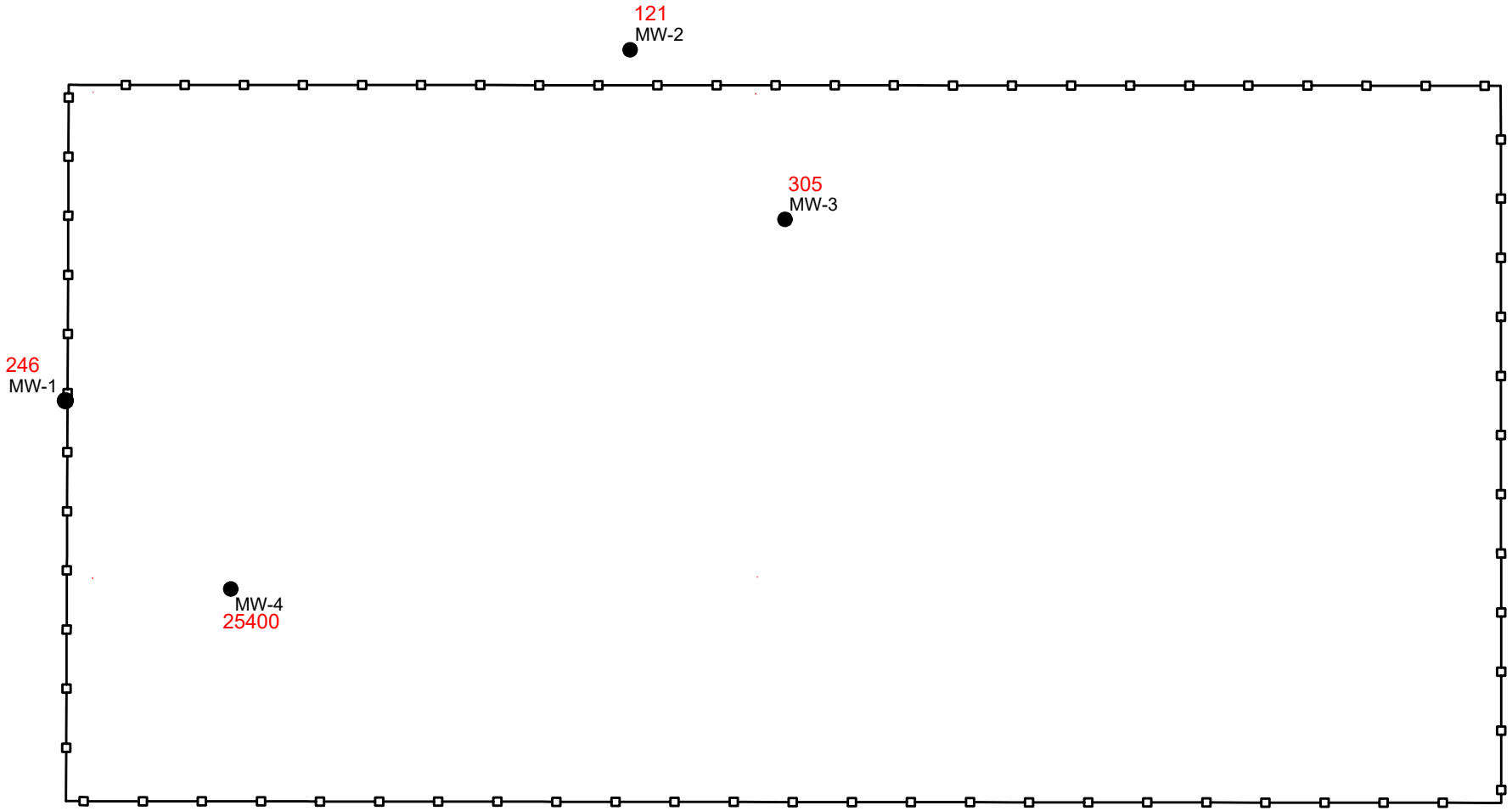
150 0 150

Graphic Scale in Feet

3 Bear Energy LLC.,
Cottonwood Facility
Unit N (SE 1/4 of SW 1/4)
Sec. 20, T. 26 S., R. 26 E.
Eddy County, New Mexico
N 32.0210483°
W -104.31879°

Larson & Associates, Inc.
Environmental Consultants

Figure 3 - Groundwater Potentiometric Map, May 7, 2020



150 0 150

Graphic Scale in Feet

3 Bear Energy LLC.,
Cottonwood Facility
Unit N (SE 1/4 of SW 1/4)
Sec. 20, T. 26 S., R. 26 E.
Eddy County, New Mexico
N 32.0210483°
W -104.31879°

Larson & Associates, Inc.
Environmental Consultants

Legend

25400
MW-4 - Monitoring Well Location and Chloride Concentration in Groundwater, mg/L, May 7, 2020

- Containment Area Location

- Fence

Figure 4 - Chloride Concentration in Groundwater Map, May 7, 2020

Appendix A

Laboratory Report

May 19, 2020

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Midland, TX 79701
TEL: (432) 687-0901
FAX: (432) 687-0456

Order No.: 2005075

RE: 3 Bear - Cottonwood

Dear Mark Larson:

DHL Analytical, Inc. received 5 sample(s) on 5/12/2020 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: T104704211-20-25

Table of Contents

№ 1150

CHAIN-OF-CUSTODY

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

Data Reported to:

DATE: 5/11/2020 PAGE 1 OF 1

PO#: LAB WORK ORDER#: 2005075

PROJECT LOCATION OR NAME: 3 Bear - Cottonwood

LAI PROJECT #: 18-01760-01 COLLECTOR: EC/DS

TRRP report? ☐ Yes ☒ No

TIME ZONE: Time zone/State: MST

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 ☐	CHLORIDES ☒ ANIONS ☐ ALKALINITY ☐ M300	FIELD NOTES
MW-1	01	5/7/20	1140	W	10	6			X		X			X	X	X													X	
MW-2	02		1248																											
MW-3	03		1320																											
MW-4	04		1230		9																									
Dup-1	05		1120																											

TOTAL 5

RELINQUISHED BY:(Signature)	DATE/TIME	RECEIVED BY: (Signature)
Rachel Owen	5-11-2020/5:00	FedEX
FedEX	5-12-2020 09:15	
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: 5.7 THERM#: 78
CUSTODY SEALS - ☐ BROKEN ☑ INTACT ☐ NOT USED
☐ CARRIER BILL # FedEX
☐ HAND DELIVERED

LSO

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

Airbill No. LSO0BYGS

LSO0BYGS

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

Company Name: DHL Analytical

Street Address (No P.O. Box or P.O. Box Zip Code® Deliveries): 2300 Double Creek Drive

Suite / Floor:

City: Round Rock | State: TX | Zip: 78664

2. From: Print Name (Person): Sunshine | 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.

- ☐ **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: 1 lb

Your Company's Billing Reference Information

Ship Date: (mm/dd/yy) 05 / 1 / 20

5. Payment:

FOR DRIVER USE ONLY

Driver Number _____

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

Pick-up Location Midl

Date: 20

Time: 50

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.

5.7

458

CUSTODY SEAL

DATE 25/11/20

SIGNATURE

DHL ANALYTICAL

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name **Larson & Associates**

Date Received: **5/12/2020**

Work Order Number **2005075**

Received by: **JH**

Checklist completed by: _____ 5/12/2020
Signature | Date

Reviewed by: DL 5/12/2020
Initials | Date

Carrier name: FedEx 1day

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 ☐	**5.7** °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 _____

DHL Analytical, Inc. **Date:** *19-May-20*

CLIENT: Larson & Associates
Project: 3 Bear - Cottonwood
Lab Order: 2005075

CASE NARRATIVE

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

Method SW8260D - Volatile Organics Analysis
Method E300 - Anions Analysis
Method M8015D - DRO Analysis
Method M8015V - GRO Analysis

LOG IN

The samples were received and log-in performed on 5/12/2020. A total of 5 samples were received and analyzed. The samples arrived in good condition and were properly packaged. The samples were collected in Mountain Standard time. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

VOLATILE ORGANICS ANALYSIS

For Volatile Organics Analysis, Sample MW-4 was diluted due to matrix.

GRO ANALYSIS

For GRO Analysis, Sample MW-4 was diluted due to matrix.

DHL Analytical, Inc.

Date: *19-May-20*

CLIENT: Larson & Associates
Project: 3 Bear - Cottonwood
Lab Order: 2005075

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
2005075-01	MW-1		05/07/20 11:40 AM	5/12/2020
2005075-02	MW-2		05/07/20 12:48 PM	5/12/2020
2005075-03	MW-3		05/07/20 01:20 PM	5/12/2020
2005075-04	MW-4		05/07/20 12:30 PM	5/12/2020
2005075-05	Dup-1		05/07/20 11:20 AM	5/12/2020

Lab Order: 2005075
Client: Larson & Associates
Project: 3 Bear - Cottonwood

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
2005075-01A	MW-1	05/07/20 11:40 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	05/13/20 01:29 PM	96338
2005075-01B	MW-1	05/07/20 11:40 AM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	05/14/20 09:07 AM	96344
2005075-01C	MW-1	05/07/20 11:40 AM	Aqueous	E300	Anion Preparation	05/12/20 09:07 AM	96309
2005075-01D	MW-1	05/07/20 11:40 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	05/13/20 08:56 AM	96326
2005075-02A	MW-2	05/07/20 12:48 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	05/13/20 01:29 PM	96338
2005075-02B	MW-2	05/07/20 12:48 PM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	05/14/20 09:07 AM	96344
2005075-02C	MW-2	05/07/20 12:48 PM	Aqueous	E300	Anion Preparation	05/12/20 09:07 AM	96309
2005075-02D	MW-2	05/07/20 12:48 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	05/13/20 08:56 AM	96326
2005075-03A	MW-3	05/07/20 01:20 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	05/13/20 01:29 PM	96338
2005075-03B	MW-3	05/07/20 01:20 PM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	05/14/20 09:07 AM	96344
2005075-03C	MW-3	05/07/20 01:20 PM	Aqueous	E300	Anion Preparation	05/12/20 09:07 AM	96309
2005075-03D	MW-3	05/07/20 01:20 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	05/13/20 08:56 AM	96326
2005075-04A	MW-4	05/07/20 12:30 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	05/13/20 01:29 PM	96338
2005075-04B	MW-4	05/07/20 12:30 PM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	05/14/20 09:07 AM	96344
2005075-04C	MW-4	05/07/20 12:30 PM	Aqueous	E300	Anion Preparation	05/12/20 09:07 AM	96309
2005075-04D	MW-4	05/07/20 12:30 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	05/13/20 08:56 AM	96326
2005075-05A	Dup-1	05/07/20 11:20 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	05/13/20 01:29 PM	96338
2005075-05B	Dup-1	05/07/20 11:20 AM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	05/14/20 09:07 AM	96344
2005075-05C	Dup-1	05/07/20 11:20 AM	Aqueous	E300	Anion Preparation	05/12/20 09:07 AM	96309
	Dup-1	05/07/20 11:20 AM	Aqueous	E300	Anion Preparation	05/12/20 09:07 AM	96309
2005075-05D	Dup-1	05/07/20 11:20 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	05/13/20 08:56 AM	96326

Lab Order: 2005075
Client: Larson & Associates
Project: 3 Bear - Cottonwood

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
2005075-01A	MW-1	Aqueous	SW8260D	Volatile Aromatics by GC/MS	96338	1	05/13/20 03:41 PM	GCMS3_200513A
2005075-01B	MW-1	Aqueous	M8015V	TPH Purgeable by GC - Water	96344	1	05/14/20 11:58 AM	GC4_200514A
2005075-01C	MW-1	Aqueous	E300	Anions by IC method - Water	96309	100	05/12/20 05:24 PM	IC4_200512A
2005075-01D	MW-1	Aqueous	M8015D	TPH Extractable by GC - Water	96326	1	05/18/20 11:04 AM	GC15_200518A
2005075-02A	MW-2	Aqueous	SW8260D	Volatile Aromatics by GC/MS	96338	1	05/13/20 04:08 PM	GCMS3_200513A
2005075-02B	MW-2	Aqueous	M8015V	TPH Purgeable by GC - Water	96344	1	05/14/20 12:22 PM	GC4_200514A
2005075-02C	MW-2	Aqueous	E300	Anions by IC method - Water	96309	10	05/12/20 06:12 PM	IC4_200512A
2005075-02D	MW-2	Aqueous	M8015D	TPH Extractable by GC - Water	96326	1	05/18/20 11:14 AM	GC15_200518A
2005075-03A	MW-3	Aqueous	SW8260D	Volatile Aromatics by GC/MS	96338	1	05/13/20 04:35 PM	GCMS3_200513A
2005075-03B	MW-3	Aqueous	M8015V	TPH Purgeable by GC - Water	96344	1	05/14/20 12:47 PM	GC4_200514A
2005075-03C	MW-3	Aqueous	E300	Anions by IC method - Water	96309	10	05/12/20 06:28 PM	IC4_200512A
2005075-03D	MW-3	Aqueous	M8015D	TPH Extractable by GC - Water	96326	1	05/18/20 11:23 AM	GC15_200518A
2005075-04A	MW-4	Aqueous	SW8260D	Volatile Aromatics by GC/MS	96338	10	05/13/20 06:19 PM	GCMS3_200513A
2005075-04B	MW-4	Aqueous	M8015V	TPH Purgeable by GC - Water	96344	10	05/14/20 01:10 PM	GC4_200514A
2005075-04C	MW-4	Aqueous	E300	Anions by IC method - Water	96309	1000	05/12/20 05:08 PM	IC4_200512A
2005075-04D	MW-4	Aqueous	M8015D	TPH Extractable by GC - Water	96326	1	05/18/20 11:32 AM	GC15_200518A
2005075-05A	Dup-1	Aqueous	SW8260D	Volatile Aromatics by GC/MS	96338	1	05/13/20 05:01 PM	GCMS3_200513A
2005075-05B	Dup-1	Aqueous	M8015V	TPH Purgeable by GC - Water	96344	1	05/14/20 01:33 PM	GC4_200514A
2005075-05C	Dup-1	Aqueous	E300	Anions by IC method - Water	96309	100	05/12/20 05:40 PM	IC4_200512A
	Dup-1	Aqueous	E300	Anions by IC method - Water	96309	10	05/12/20 06:44 PM	IC4_200512A
2005075-05D	Dup-1	Aqueous	M8015D	TPH Extractable by GC - Water	96326	1	05/18/20 11:41 AM	GC15_200518A

DHL Analytical, Inc.

Date: *19-May-20*

CLIENT:	Larson & Associates	**Client Sample ID:**	MW-1
Project:	3 Bear - Cottonwood	**Lab ID:**	2005075-01
Project No:	18-0176-01	**Collection Date:**	05/07/20 11:40 AM
Lab Order:	2005075	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.0787	0.0787	0.0984		mg/L	1	05/18/20 11:04 AM
TPH-ORO >C28-C35	<0.0787	0.0787	0.0984		mg/L	1	05/18/20 11:04 AM
Surr: Isopropylbenzene	79.4	0	47-142		%REC	1	05/18/20 11:04 AM
Surr: Octacosane	82.9	0	51-124		%REC	1	05/18/20 11:04 AM
VOLATILE AROMATICS BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.000800	0.000800	0.00200		mg/L	1	05/13/20 03:41 PM
Ethylbenzene	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 03:41 PM
Toluene	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 03:41 PM
Total Xylenes	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 03:41 PM
Surr: 1,2-Dichloroethane-d4	100	0	72-119		%REC	1	05/13/20 03:41 PM
Surr: 4-Bromofluorobenzene	101	0	76-119		%REC	1	05/13/20 03:41 PM
Surr: Dibromofluoromethane	102	0	85-115		%REC	1	05/13/20 03:41 PM
Surr: Toluene-d8	102	0	81-120		%REC	1	05/13/20 03:41 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
TPH-GRO (C6-C10)	<0.0600	0.0600	0.100		mg/L	1	05/14/20 11:58 AM
Surr: Tetrachlorethene	129	0	74-138		%REC	1	05/14/20 11:58 AM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	246	30.0	100		mg/L	100	05/12/20 05:24 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: *19-May-20*

CLIENT:	Larson & Associates	**Client Sample ID:**	MW-2
Project:	3 Bear - Cottonwood	**Lab ID:**	2005075-02
Project No:	18-0176-01	**Collection Date:**	05/07/20 12:48 PM
Lab Order:	2005075	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.0823	0.0823	0.103		mg/L	1	05/18/20 11:14 AM
TPH-ORO >C28-C35	<0.0823	0.0823	0.103		mg/L	1	05/18/20 11:14 AM
Surr: Isopropylbenzene	89.0	0	47-142		%REC	1	05/18/20 11:14 AM
Surr: Octacosane	80.9	0	51-124		%REC	1	05/18/20 11:14 AM
VOLATILE AROMATICS BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.000800	0.000800	0.00200		mg/L	1	05/13/20 04:08 PM
Ethylbenzene	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 04:08 PM
Toluene	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 04:08 PM
Total Xylenes	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 04:08 PM
Surr: 1,2-Dichloroethane-d4	102	0	72-119		%REC	1	05/13/20 04:08 PM
Surr: 4-Bromofluorobenzene	92.7	0	76-119		%REC	1	05/13/20 04:08 PM
Surr: Dibromofluoromethane	104	0	85-115		%REC	1	05/13/20 04:08 PM
Surr: Toluene-d8	102	0	81-120		%REC	1	05/13/20 04:08 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
TPH-GRO (C6-C10)	<0.0600	0.0600	0.100		mg/L	1	05/14/20 12:22 PM
Surr: Tetrachlorethene	130	0	74-138		%REC	1	05/14/20 12:22 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	121	3.00	10.0		mg/L	10	05/12/20 06:12 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: *19-May-20*

CLIENT:	Larson & Associates	**Client Sample ID:**	MW-3
Project:	3 Bear - Cottonwood	**Lab ID:**	2005075-03
Project No:	18-0176-01	**Collection Date:**	05/07/20 01:20 PM
Lab Order:	2005075	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.0997	0.0997	0.125		mg/L	1	05/18/20 11:23 AM
TPH-ORO >C28-C35	<0.0997	0.0997	0.125		mg/L	1	05/18/20 11:23 AM
Surr: Isopropylbenzene	72.3	0	47-142		%REC	1	05/18/20 11:23 AM
Surr: Octacosane	83.3	0	51-124		%REC	1	05/18/20 11:23 AM
VOLATILE AROMATICS BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.000800	0.000800	0.00200		mg/L	1	05/13/20 04:35 PM
Ethylbenzene	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 04:35 PM
Toluene	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 04:35 PM
Total Xylenes	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 04:35 PM
Surr: 1,2-Dichloroethane-d4	100	0	72-119		%REC	1	05/13/20 04:35 PM
Surr: 4-Bromofluorobenzene	100	0	76-119		%REC	1	05/13/20 04:35 PM
Surr: Dibromofluoromethane	102	0	85-115		%REC	1	05/13/20 04:35 PM
Surr: Toluene-d8	97.3	0	81-120		%REC	1	05/13/20 04:35 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
TPH-GRO (C6-C10)	<0.0600	0.0600	0.100		mg/L	1	05/14/20 12:47 PM
Surr: Tetrachlorethene	131	0	74-138		%REC	1	05/14/20 12:47 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	305	3.00	10.0		mg/L	10	05/12/20 06:28 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: *19-May-20*

CLIENT:	Larson & Associates	**Client Sample ID:**	MW-4
Project:	3 Bear - Cottonwood	**Lab ID:**	2005075-04
Project No:	18-0176-01	**Collection Date:**	05/07/20 12:30 PM
Lab Order:	2005075	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.110	0.110	0.138		mg/L	1	05/18/20 11:32 AM
TPH-ORO >C28-C35	<0.110	0.110	0.138		mg/L	1	05/18/20 11:32 AM
Surr: Isopropylbenzene	56.3	0	47-142		%REC	1	05/18/20 11:32 AM
Surr: Octacosane	79.5	0	51-124		%REC	1	05/18/20 11:32 AM
VOLATILE AROMATICS BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.00800	0.00800	0.0200		mg/L	10	05/13/20 06:19 PM
Ethylbenzene	<0.0200	0.0200	0.0600		mg/L	10	05/13/20 06:19 PM
Toluene	<0.0200	0.0200	0.0600		mg/L	10	05/13/20 06:19 PM
Total Xylenes	<0.0200	0.0200	0.0600		mg/L	10	05/13/20 06:19 PM
Surr: 1,2-Dichloroethane-d4	103	0	72-119		%REC	10	05/13/20 06:19 PM
Surr: 4-Bromofluorobenzene	107	0	76-119		%REC	10	05/13/20 06:19 PM
Surr: Dibromofluoromethane	103	0	85-115		%REC	10	05/13/20 06:19 PM
Surr: Toluene-d8	102	0	81-120		%REC	10	05/13/20 06:19 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
TPH-GRO (C6-C10)	<0.600	0.600	1.00		mg/L	10	05/14/20 01:10 PM
Surr: Tetrachlorethene	134	0	74-138		%REC	10	05/14/20 01:10 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	25400	300	1000		mg/L	1000	05/12/20 05:08 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: *19-May-20*

CLIENT:	Larson & Associates	**Client Sample ID:**	Dup-1
Project:	3 Bear - Cottonwood	**Lab ID:**	2005075-05
Project No:	18-0176-01	**Collection Date:**	05/07/20 11:20 AM
Lab Order:	2005075	**Matrix:**	AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		**M8015D**					Analyst: **BTJ**
TPH-DRO C10-C28	<0.0800	0.0800	0.100		mg/L	1	05/18/20 11:41 AM
TPH-ORO >C28-C35	<0.0800	0.0800	0.100		mg/L	1	05/18/20 11:41 AM
Surr: Isopropylbenzene	75.2	0	47-142		%REC	1	05/18/20 11:41 AM
Surr: Octacosane	83.6	0	51-124		%REC	1	05/18/20 11:41 AM
VOLATILE AROMATICS BY GC/MS		**SW8260D**					Analyst: **SNM**
Benzene	<0.000800	0.000800	0.00200		mg/L	1	05/13/20 05:01 PM
Ethylbenzene	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 05:01 PM
Toluene	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 05:01 PM
Total Xylenes	<0.00200	0.00200	0.00600		mg/L	1	05/13/20 05:01 PM
Surr: 1,2-Dichloroethane-d4	102	0	72-119		%REC	1	05/13/20 05:01 PM
Surr: 4-Bromofluorobenzene	99.1	0	76-119		%REC	1	05/13/20 05:01 PM
Surr: Dibromofluoromethane	104	0	85-115		%REC	1	05/13/20 05:01 PM
Surr: Toluene-d8	103	0	81-120		%REC	1	05/13/20 05:01 PM
TPH PURGEABLE BY GC - WATER		**M8015V**					Analyst: **BTJ**
TPH-GRO (C6-C10)	<0.0600	0.0600	0.100		mg/L	1	05/14/20 01:33 PM
Surr: Tetrachlorethene	130	0	74-138		%REC	1	05/14/20 01:33 PM
ANIONS BY IC METHOD - WATER		**E300**					Analyst: **SNM**
Chloride	221	3.00	10.0		mg/L	10	05/12/20 06:44 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

CLIENT: Larson & Associates
Work Order: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_200518A

The QC data in batch 96326 applies to the following samples: 2005075-01D, 2005075-02D, 2005075-03D, 2005075-04D, 2005075-05D

Sample ID: **MB-96326** Batch ID: **96326** TestNo: **M8015D** Units: **mg/L**
SampType: **MBLK** Run ID: **GC15_200518A** Analysis Date: **5/18/2020 10:37:47 AM** Prep Date: **5/13/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0800	0.100								
TPH-ORO >C28-C35	<0.0800	0.100								
Surr: Isopropylbenzene	0.0700		0.1000		70.0	47	142			
Surr: Octacosane	0.0772		0.1000		77.2	51	124			

Sample ID: **LCS-96326** Batch ID: **96326** TestNo: **M8015D** Units: **mg/L**
SampType: **LCS** Run ID: **GC15_200518A** Analysis Date: **5/18/2020 10:46:51 AM** Prep Date: **5/13/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.03	0.100	1.250	0	82.4	50	114			
Surr: Isopropylbenzene	0.0784		0.1000		78.4	47	142			
Surr: Octacosane	0.0765		0.1000		76.5	51	124			

Sample ID: **LCSD-96326** Batch ID: **96326** TestNo: **M8015D** Units: **mg/L**
SampType: **LCSD** Run ID: **GC15_200518A** Analysis Date: **5/18/2020 10:55:55 AM** Prep Date: **5/13/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.04	0.100	1.250	0	83.4	50	114	1.12	30	
Surr: Isopropylbenzene	0.0616		0.1000		61.6	47	142	0	0	
Surr: Octacosane	0.0757		0.1000		75.7	51	124	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: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_200518A

Sample ID: **ICV-200518**	Batch ID: **R110526**	TestNo: **M8015D**	Units: **mg/L**
SampType: **ICV**	Run ID: **GC15_200518A**	Analysis Date: **5/18/2020 10:22:59 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	444	0.100	500.0	0	88.8	80	120			
TPH-ORO >C28-C35	0.437	0.100	0							
Surr: Isopropylbenzene	28.2		25.00		113	80	120			
Surr: Octacosane	21.5		25.00		86.0	80	120			

Sample ID: **CCV1-200518**	Batch ID: **R110526**	TestNo: **M8015D**	Units: **mg/L**
SampType: **CCV**	Run ID: **GC15_200518A**	Analysis Date: **5/18/2020 12:00:01 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	214	0.100	250.0	0	85.4	80	120			
TPH-ORO >C28-C35	0.0940	0.100	0							
Surr: Isopropylbenzene	13.6		12.50		109	80	120			
Surr: Octacosane	10.3		12.50		82.8	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: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_200514A

The QC data in batch 96344 applies to the following samples: 2005075-01B, 2005075-02B, 2005075-03B, 2005075-04B, 2005075-05B

Sample ID: **LCS-96344**	Batch ID: **96344**	TestNo: **M8015V**	Units: **mg/L**
SampType: **LCS**	Run ID: **GC4_200514A**	Analysis Date: **5/14/2020 10:45:04 AM**	Prep Date: **5/14/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO (C6-C10)	2.57	0.100	2.500	0	103	67	136			
Surr: Tetrachlorethene	0.453		0.4000		113	74	138			

Sample ID: **MB-96344**	Batch ID: **96344**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MBLK**	Run ID: **GC4_200514A**	Analysis Date: **5/14/2020 11:34:42 AM**	Prep Date: **5/14/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO (C6-C10)	<0.0600	0.100								
Surr: Tetrachlorethene	0.465		0.4000		116	74	138			

Sample ID: **2005075-01BMS**	Batch ID: **96344**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MS**	Run ID: **GC4_200514A**	Analysis Date: **5/14/2020 1:56:38 PM**	Prep Date: **5/14/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO (C6-C10)	2.46	0.100	2.500	0	98.5	67	136			
Surr: Tetrachlorethene	0.425		0.4000		106	74	138			

Sample ID: **2005075-01BMSD**	Batch ID: **96344**	TestNo: **M8015V**	Units: **mg/L**
SampType: **MSD**	Run ID: **GC4_200514A**	Analysis Date: **5/14/2020 2:20:13 PM**	Prep Date: **5/14/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO (C6-C10)	2.79	0.100	2.500	0	111	67	136	12.4	30	
Surr: Tetrachlorethene	0.459		0.4000		115	74	138	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: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_200514A

Sample ID: **ICV-200514**	Batch ID: **R110489**	TestNo: **M8015V**	Units: **mg/L**
SampType: **ICV**	Run ID: **GC4_200514A**	Analysis Date: **5/14/2020 10:20:31 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO (C6-C10)	4.60	0.100	5.000	0	92.1	80	120			
Surr: Tetrachlorethene	0.437		0.4000		109	74	138			

Sample ID: **CCV1-200514**	Batch ID: **R110489**	TestNo: **M8015V**	Units: **mg/L**
SampType: **CCV**	Run ID: **GC4_200514A**	Analysis Date: **5/14/2020 2:43:54 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-GRO (C6-C10)	2.46	0.100	2.500	0	98.4	80	120			
Surr: Tetrachlorethene	0.435		0.4000		109	74	138			

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: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS3_200513A

The QC data in batch 96338 applies to the following samples: 2005075-01A, 2005075-02A, 2005075-03A, 2005075-04A, 2005075-05A

Sample ID: **LCS-96338** Batch ID: **96338** TestNo: **SW8260D** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS3_200513A** Analysis Date: **5/13/2020 2:49:00 PM** Prep Date: **5/13/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0466	0.00200	0.0464	0	100	81	122			
Ethylbenzene	0.0448	0.00600	0.0464	0	96.5	73	127			
Toluene	0.0476	0.00600	0.0464	0	103	77	122			
Total Xylenes	0.133	0.00600	0.139	0	95.8	80	121			
Surr: 1,2-Dichloroethane-d4	50.6		50.00		101	72	119			
Surr: 4-Bromofluorobenzene	48.3		50.00		96.7	76	119			
Surr: Dibromofluoromethane	51.2		50.00		102	85	115			
Surr: Toluene-d8	51.0		50.00		102	81	120			

Sample ID: **MB-96338** Batch ID: **96338** TestNo: **SW8260D** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS3_200513A** Analysis Date: **5/13/2020 3:16:00 PM** Prep Date: **5/13/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	<0.000800	0.00200								
Ethylbenzene	<0.00200	0.00600								
Toluene	<0.00200	0.00600								
Total Xylenes	<0.00200	0.00600								
Surr: 1,2-Dichloroethane-d4	50.5		50.00		101	72	119			
Surr: 4-Bromofluorobenzene	51.0		50.00		102	76	119			
Surr: Dibromofluoromethane	51.0		50.00		102	85	115			
Surr: Toluene-d8	51.3		50.00		103	81	120			

Sample ID: **2005075-01AMS** Batch ID: **96338** TestNo: **SW8260D** Units: **mg/L**
SampType: **MS** Run ID: **GCMS3_200513A** Analysis Date: **5/13/2020 5:27:00 PM** Prep Date: **5/13/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0471	0.00200	0.0464	0	101	81	122			
Ethylbenzene	0.0452	0.00600	0.0464	0	97.4	73	127			
Toluene	0.0469	0.00600	0.0464	0	101	77	122			
Total Xylenes	0.135	0.00600	0.139	0	97.5	80	121			
Surr: 1,2-Dichloroethane-d4	50.2		50.00		100	72	119			
Surr: 4-Bromofluorobenzene	48.1		50.00		96.1	76	119			
Surr: Dibromofluoromethane	51.1		50.00		102	85	115			
Surr: Toluene-d8	50.6		50.00		101	81	120			

Sample ID: **2005075-01AMSD** Batch ID: **96338** TestNo: **SW8260D** Units: **mg/L**
SampType: **MSD** Run ID: **GCMS3_200513A** Analysis Date: **5/13/2020 5:54:00 PM** Prep Date: **5/13/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0470	0.00200	0.0464	0	101	81	122	0.196	20	

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: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS3_200513A

Sample ID: **2005075-01AMSD** Batch ID: **96338** TestNo: **SW8260D** Units: **mg/L**
SampType: **MSD** Run ID: **GCMS3_200513A** Analysis Date: **5/13/2020 5:54:00 PM** Prep Date: **5/13/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	0.0447	0.00600	0.0464	0	96.3	73	127	1.07	20	
Toluene	0.0462	0.00600	0.0464	0	99.6	77	122	1.51	20	
Total Xylenes	0.138	0.00600	0.139	0	99.4	80	121	1.92	20	
Surr: 1,2-Dichloroethane-d4	50.3		50.00		101	72	119	0	0	
Surr: 4-Bromofluorobenzene	54.8		50.00		110	76	119	0	0	
Surr: Dibromofluoromethane	51.4		50.00		103	85	115	0	0	
Surr: Toluene-d8	50.5		50.00		101	81	120	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: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS3_200513A

Sample ID: **ICV-200513** Batch ID: **R110476** TestNo: **SW8260D** Units: **mg/L**
SampType: **ICV** Run ID: **GCMS3_200513A** Analysis Date: **5/13/2020 2:23:00 PM** Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.0909	0.00200	0.0928	0	97.9	70	130			
Ethylbenzene	0.0877	0.00600	0.0928	0	94.5	70	130			
Toluene	0.0927	0.00600	0.0928	0	99.9	70	130			
Total Xylenes	0.262	0.00600	0.278	0	94.1	70	130			
Surr: 1,2-Dichloroethane-d4	50.2		50.00		100	72	119			
Surr: 4-Bromofluorobenzene	51.0		50.00		102	76	119			
Surr: Dibromofluoromethane	51.0		50.00		102	85	115			
Surr: Toluene-d8	51.1		50.00		102	81	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: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: IC4_200512A

The QC data in batch 96309 applies to the following samples: 2005075-01C, 2005075-02C, 2005075-03C, 2005075-04C, 2005075-05C

Sample ID: **MB-96309**	Batch ID: **96309**	TestNo: **E300**	Units: **mg/L**
SampType: **MBLK**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 10:39:02 AM**	Prep Date: **5/12/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								

Sample ID: **LCS-96309**	Batch ID: **96309**	TestNo: **E300**	Units: **mg/L**
SampType: **LCS**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 10:55:02 AM**	Prep Date: **5/12/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.1	1.00	10.00	0	101	90	110			

Sample ID: **LCSD-96309**	Batch ID: **96309**	TestNo: **E300**	Units: **mg/L**
SampType: **LCSD**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 11:11:02 AM**	Prep Date: **5/12/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.1	1.00	10.00	0	101	90	110	0.169	20	

Sample ID: **2005082-01BMS**	Batch ID: **96309**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 7:16:52 PM**	Prep Date: **5/12/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	284	10.0	200.0	89.87	97.0	90	110			

Sample ID: **2005082-01BMSD**	Batch ID: **96309**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 7:32:52 PM**	Prep Date: **5/12/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	284	10.0	200.0	89.87	97.2	90	110	0.108	20	

Sample ID: **2005082-02BMS**	Batch ID: **96309**	TestNo: **E300**	Units: **mg/L**
SampType: **MS**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 8:04:52 PM**	Prep Date: **5/12/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	266	10.0	200.0	73.09	96.3	90	110			

Sample ID: **2005082-02BMSD**	Batch ID: **96309**	TestNo: **E300**	Units: **mg/L**
SampType: **MSD**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 8:20:52 PM**	Prep Date: **5/12/2020**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	266	10.0	200.0	73.09	96.5	90	110	0.140	20	

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: 2005075
Project: 3 Bear - Cottonwood

ANALYTICAL QC SUMMARY REPORT

RunID: IC4_200512A

Sample ID: **ICV-200512**	Batch ID: **R110454**	TestNo: **E300**	Units: **mg/L**
SampType: **ICV**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 10:07:02 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	25.0	1.00	25.00	0	100	90	110			

Sample ID: **CCV1-200512**	Batch ID: **R110454**	TestNo: **E300**	Units: **mg/L**
SampType: **CCV**	Run ID: **IC4_200512A**	Analysis Date: **5/12/2020 9:40:52 PM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	10.4	1.00	10.00	0	104	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