Review of 2021 Annual Report - Quarterly Groundwater Monitoring and Sampling: **Content satisfactory**

1. Plug and abandon (P&A) five of the site monitor wells MW-1, MW-2, MW-5, MW-7 and MW-8.

3. Quarterly monitoring and sampling should continue at MW-3, MW-4, and MW-9 with laboratory analysis of full list volatile organics per USEPA Method 8260

3. Submit Annual Monitoring Report to the OCD no later than March 31, 2023.

animas environmental services

March 31, 2022

John Bruner
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Logos Resources
2110 Afton Place
Farmington, New Mexico 87401

RE: 2021 Annual Report - Quarterly Groundwater Monitoring and Sampling
Logos Julander Federal #1E
NMOCD Incident #NJK1305853515
San Juan County, New Mexico

Dear Mr. Bruner:

Animas Environmental Services, LLC (AES) has prepared this Annual Report detailing quarterly groundwater monitoring and sampling during 2021 at the Logos Julander Federal #1E. The work is associated with a previous condensate tank release that was discovered at the Logos Resources (previously Energen) Julander Federal #1E in January 2013. A topographic site location map and an aerial site location map are included as Figures 1 and 1A, and a site plan with monitor well locations is presented as Figure 2.

1.0 Site History

1.1 Initial Release

As the result of the freezing and breaking of a production tank valve, a release of approximately 96 bbls of natural gas condensate within the production tank secondary containment area occurred and was discovered on January 14, 2013. Subsequently, Energen excavated and transported off-site approximately 3,356 cubic yards (yds^3) of petroleum hydrocarbon contaminated soil for disposal. The excavation extended to an approximate depth of 45 feet (ft) below ground surface (bgs), where groundwater seepage into the excavation occurred, and excavation conditions became unstable. Therefore, the excavation was backfilled, and one investigation well, MW-1, was installed by Envirotech, Inc. (Envirotech) to determine if groundwater had been impacted.

Groundwater laboratory analytical results from MW-1 reported 23.8 µg/L benzene, 289 µg/L toluene, 401 µg/L ethylbenzene, and 3,290 µg/L xylene concentrations. Benzene and xylene concentrations exceeded the applicable New Mexico Water Quality Control Commission (WQCC)

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standards for benzene and xylenes. Further site investigation was recommended.

1.2 Site Investigation, 2013

Between April and August 2013, AES installed seven soil borings (SB-1 through SB-7) which were completed as 1- and 2-inch diameter monitor wells (MW-2 through MW-8) in the vicinity of the release location. Soils were observed to consist primarily of clayey sand fill and native poorly graded sand with varying amounts of clay. A lens of clayey sand to lean clay was observed in each of the wells near the transition between the vadose zone and fluctuating groundwater table. Groundwater was encountered at depths ranging from approximately 37 ft to 40 ft bgs during drilling and monitor well installation. The groundwater gradient was generally flat at 0.001 ft/ft from east to west but varied in direction based on seasonal conditions.

1.2.1 Soil Field Screening and Laboratory Analytical Results

Soil field screening results showed volatile organic compound (VOC) concentrations below the New Mexico Oil Conservation Division (NMOCD) action level of 100 parts per million (ppm) in the soil samples from SB-4 through SB-7, except for SB-6 at 38 to 39.5 ft (393 ppm). Soil laboratory analytical results were below detection limits or applicable NMOCD action levels in all samples, except for SB-2 at 40 to 41 ft with 187 mg/kg total benzene, toluene, ethylbenzene and xylene (BTEX) and 2,174 mg/kg TPH (GRO/DRO) and in SB-3 with 99 mg/kg total BTEX and 1,380 mg/kg TPH (GRO/DRO).

1.2.2 Groundwater Laboratory Analytical Results

Laboratory analytical results from samples collected in August 2013 confirmed dissolved phase BTEX concentrations above applicable WQCC standards in four monitor wells, including MW-1 (primarily xylene), MW-3, MW-4 and MW-7. The highest concentrations were reported in MW-3 for benzene (18,000 µg/L), ethylbenzene (1,300 µg/L) and xylene (12,000 µg/L). The highest toluene concentration was reported in MW-4 with 28,000 µg/L.

1.3 Continued Groundwater Monitoring and Sampling, 2013 through 2020

1.3.1 2013

AES conducted groundwater monitoring and sampling in MW-1, MW-3, and MW-4 in October and November 2013, before and after completion of a soil vapor extraction pilot study. Laboratory analytical results from the latter sampling event showed that the highest dissolved phase contaminant concentrations above applicable WQCC standards were reported in MW-3 with 1,500 µg/L benzene and in MW-4 with 3,500 µg/L xylenes.

1.3.2 2014

On February 10, 2014, AES conducted additional groundwater monitoring and sampling in site monitor wells. Laboratory analytical results showed that the highest dissolved phase contaminant concentrations were all reported in MW-3 with 9,100 µg/L benzene, 8,800

µg/L toluene, 670 µg/L ethylbenzene, and 5,300 µg/L xylenes. Dissolved phase benzene, toluene, ethylbenzene, and xylene concentrations were below WQCC standards in MW-2, MW-5, MW-6, and MW-8.

AES installed monitor well MW-9 to the north of the condensate tank in May 2014 and subsequently conducted groundwater monitoring and sampling of all site monitor wells. The May 2014 laboratory analytical results showed that the highest dissolved phase contaminant concentrations were again reported in MW-3, with 14,000 µg/L benzene, 22,000 µg/L toluene, 860 µg/L ethylbenzene, and 6,300 µg/L xylenes. A slight measurable thickness of free product (0.02 ft) was reported in the newly installed MW-9.

AES began multiphase extraction (MPE) operations utilizing an RSI high vacuum multiphase extraction (MPE) unit to treat residual contaminants from MW-1, MW-3, MW-4, and MW-9 in September 2014. The unit was rotated between wells from September 20 to November 18. An estimated 62 gallons of free product were removed utilizing the MPE unit.

On December 18, 2014, one month after taking the MPE remediation unit off-line, AES conducted additional groundwater monitoring and sampling. Well MW-9 reported the highest dissolved phase contaminant concentrations with 6,600 µg/L benzene, 17,000 µg/L toluene, 750 µg/L ethylbenzene, and 7,400 µg/L xylenes.

1.3.3 2015

AES conducted groundwater monitoring and sampling of all nine monitor wells in June 2015, and eight monitor wells (MW-1, MW-3 through MW-9) in September and December 2015, as MW-2 had not exceeded WQCC standards for eight consecutive events. Average groundwater elevation fluctuated quarterly by three to four ft, with an average annual drop of 0.5 ft since 2014. Seasonal fluctuations are believed to be associated with the nearby San Juan River, as well as local irrigation activity.

Groundwater analytical results at MW-6 through MW-8 were reported below WQCC standards during 2015, and as of December 2015, MW-6 and MW-8 had not exceeded WQCC standards for eight consecutive events, so groundwater sampling in these wells was suspended. Field measurements and laboratory analytical results are included in Tables 1 and 2, respectively.

1.3.4 2016

Groundwater monitoring and sampling of six monitor wells (MW-1, MW-3 through MW-5, MW-7, and MW-9) was conducted by AES in March, June, September/October, and December 2016. Note that MW-6 and MW-8 were re-sampled in December 2016 to confirm that concentrations remained below WQCC standards. Average groundwater elevation fluctuated quarterly by one to four ft, with an average annual drop of 1.09 ft since 2015.

1.3.5 2017

AES conducted groundwater monitoring and sampling of six monitor wells (MW-1, MW-3 through MW-5, MW-7, and MW-9) in March 2017, and four monitor wells (MW-1, MW-3, MW-4, and MW-5) in June, September/October, and December 2017 (MW-7 had not exceeded WQCC standards for eight consecutive events, and NAPL was detected in in MW-9). Average groundwater elevation fluctuated quarterly by one to three ft, with a year-on-year decrease of 1.56 ft in December 2017. Field measurements and laboratory analytical results are included in Tables 1 and 2, respectively.

1.3.6 2018

Groundwater monitoring and sampling of six monitor wells (MW-1, MW-3 through MW-5, MW-7, and MW-9) was conducted by AES in March, June, September, and December 2018. Site groundwater elevations reached the lowest recorded measurements in June 2018 for most of the site wells; MW-2 was dry during the March, June and December sampling events. The highest BTEX concentrations were reported in MW-3, with with 17,000 µg/L benzene, 15,000 µg/L toluene, 970 µg/L ethylbenzene, and 9,100 µg/L total xylenes. NAPL was reported in MW-4 in June (0.07 ft) and in MW-9 in March and June, respectively, with 0.11 ft and 0.56 ft of NAPL.

1.3.7 2019

AES conducted groundwater monitoring and sampling of five monitor wells (MW-1, MW-3 through MW-5, and MW-9) in March, July, and September 2019. The same wells, except MW-5 (frozen solid), were monitored and sampled in December 2019. Average groundwater elevation fluctuated quarterly by zero to three ft, with a year-on-year decrease of 0.08 ft in December 2019. The March 2019 benzene concentration (6.4 µg/L) was recorded slightly above the WQCC standard for the first time since March 2013. Field measurements and laboratory analytical results are included in Tables 1 and 2, respectively.

1.3.8 2020

Continued groundwater monitoring and sampling by AES of five monitor wells (MW-1, MW-3, MW-4, MW-5, and MW-9) continued in March, June, October, and December 2020. Contaminant concentrations in MW-5 remained below WQCC standards for the eight consecutive sampling events as of December 2020. Average groundwater elevation fluctuated quarterly by 0.5 to 3.3 ft, with a year-on-year decrease of 1.17 ft in December 2020. Field measurements and laboratory analytical results are included in Tables 1 and 2, respectively.

2.0 Groundwater Monitoring and Sampling, 2021

AES conducted groundwater monitoring and sampling of four monitor wells (MW-1, MW-3, MW-4, and MW-9) during the March quarterly sampling event, and three monitor wells (MW-3, MW-4, and MW-9) during the June, September, and December events. Notification was made prior to sampling activities and NMOCD correspondence is attached.

All site monitor wells were gauged for depth to groundwater in order to monitor season groundwater fluctuations and calculate gradient. Samples were collected with new disposable bailers and transferred into 40-mL vials, which were labeled and stored at less than 6°C in an insulated cooler until delivered to Hall in Albuquerque, New Mexico. Groundwater samples were analyzed for full list volatile organics per U.S. Environmental Protection Agency (USEPA) Method 8260.

2.1 Groundwater Measurement and Water Quality Data

2.1.1 March 2021 Groundwater Elevations and Water Quality Measurements

Based on data collected during the March 2021 sampling event, groundwater elevations decreased by approximately 3.04 ft across the site since the December 2020 sampling event. Groundwater elevations ranged between 5,413.36 ft above mean sea level (AMSL) in MW-2 and 5,415.64 ft AMSL in MW-1. Groundwater gradient was calculated to be in a northern direction with a magnitude of 0.028 ft/ft.

A residual NAPL sheen was detected in MW-4 and MW-9. Conductivity measurements were 0.751 mS/cm in MW-1 and 1.066 mS/cm in MW-3. MW-1 and MW-3 respective temperature readings were 14.7˚C and 15.2˚C, and oxidation reduction potential (ORP) readings were -130.8 mV and -94.9 mV.

2.1.2 June 2021 Groundwater Elevations and Water Quality Measurements

June 2021 average groundwater elevations decreased by 0.46 ft across the site since the March sampling event. Groundwater elevations were between 5,412.82 ft AMSL in MW-5 and 5,415.11 ft AMSL in MW-1. Groundwater gradient was in a northern direction with a magnitude of 0.027 ft/ft.

A NAPL thickness of 0.04 ft was detected in MW-9, and conductivity measurements were 1.085 mS/cm in MW-3 and 0.98 mS/cm in MW-4. MW-3 and MW-4 respective temperature readings were 15.8˚C and 18.5˚C, and ORP readings were -83.9 mV and -99.0 mV.

2.1.3 September 2021 Groundwater Elevations and Water Quality Measurements

September 2021 average groundwater elevations increased by 3.96 ft across the site since the June sampling event. Groundwater elevations ranged between 5,416.73 ft AMSL in

MW-5 and MW-6 to 5,419.13 ft AMSL in MW-1. Groundwater gradient was calculated in a northwesterly direction with a magnitude of 0.025 ft/ft.
A residual sheen was detected in MW-4 and MW-9. Water quality readings were taken at MW-3 only. Conductivity was 1.020 mS/cm, temperature was recorded at 15.8˚C, the ORP reading was -75.4 mV.

2.1.4 December 2021 Groundwater Elevations and Water Quality Measurements

Based on data collected during the December 2021 sampling event, groundwater elevations decreased by approximately 0.96 ft across the site since the September sampling event. Groundwater elevations ranged between 5,416.12 ft AMSL in MW-5 and 5,418.27 ft AMSL in MW-1. Groundwater gradient was in a north-northwesterly direction with a magnitude of 0.015 ft/ft.

A residual sheen was detected in MW-4 and MW-9, and conductivity measurements were 0.769 mS/cm in MW-1 and 1.160 mS/cm in MW-5. MW-1 and MW-5 respective temperature readings were 14.5˚C and 14.3˚C, and ORP readings were -38.2 mV and 54.4 mV.

Groundwater elevations and contours from March, June, September, and December 2021 are presented on Figure 3. Depth to groundwater measurements and water quality data are summarized and presented in Table 1. Groundwater sample collection forms are attached.

2.2 Groundwater Analytical Results

2.2.1 March 2021 Results

March 2021 groundwater analytical results showed that dissolved phase benzene concentrations were reported above the WQCC standard of 5 µg/L in MW-3 (9,700 µg/L) and MW-9 (6,300 µg/L). Toluene concentrations exceeded the WQCC standard of 1,000 µg/L in MW-3 with 8,900 µg/L and MW-9 with 17,000 µg/L. Ethylbenzene concentrations exceeded the WQCC standard of 700 µg/L in MW-9 (930 µg/L). Xylene concentrations were above the WQCC standard of 620 µg/L in two wells: MW-3 (9,300 µg/L) and MW-9 (9,100 µg/L). No exceedances were recorded at MW-1.

2.2.2 June 2021 Results

Groundwater analytical results showed that well MW-3 had the highest benzene concentration (14,000 µg/L); MW-9 had the highest toluene (29,000 µg/L), ethylbenzene (1,600 µg/L), and total xylene (14,000 µg/L) concentrations.

2.2.3 September 2021 Results

September 2021 dissolved phase BTEX concentrations were comparable to those of June 2021, except for spikes at MW-4 which had increases to above the WQCC standards for toluene (1,400 µg/L) and total xylenes (840 µg/L). Well MW-3 had the highest benzene

concentration (12,000 µg/L), and MW-9 again had the highest toluene (24,000 µg/L), ethylbenzene (1,100 µg/L), and total xylene (12,000 µg/L) concentrations.

2.2.4 December 2021 Results

Groundwater analytical results showed that dissolved phase benzene concentrations were reported above the WQCC standard in MW-3 (12,000 µg/L), MW-4 (25 µg/L), and MW-9 (6,300 µg/L). Toluene concentrations exceeded the WQCC standard in MW-3 (11,000 µg/L) and MW-9 (14,000 µg/L). Similarly, ethylbenzene concentrations were above the WQCC standard in MW-3 (740 µg/L) and MW-9 (950 µg/L). Xylene concentrations were above the WQCC standard in MW-3 (9,300 µg/L) and MW-9 (9,100 µg/L).

Laboratory analytical results are presented in Table 2, and contaminant concentrations are included on Figure 4. Dissolved benzene, toluene, and xylene concentration contours are shown on Figures 5, 6, and 7, respectively. Groundwater contaminant concentrations over time for MW-1, MW-3, MW-4 and MW-9 are included as Graphs 1 through 4. Laboratory analytical reports are attached.

3.0 Conclusions, Recommendations, and Scheduled Site Activities

3.1 Conclusions

Groundwater monitoring and sampling at the site was conducted quarterly in 2021 by AES. Site groundwater elevations in 2021 were stable compared year-on-year to 2020 groundwater elevations. Groundwater fluctuations are most likely responses to seasonal groundwater variations associated with the nearby San Juan River, as well as local irrigation activity.

Of the nine monitor wells at this site (MW-1 through MW-9), six wells have had at least eight consecutive sampling events with concentrations *below applicable WQCC standards*, including **MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8**.

In the remaining three wells, dissolved phase concentrations can be summarized as:

MW-3 – dissolved phase concentrations remained elevated but stable and are well above applicable WQCC standards for BTEX compounds.

MW-4 - has slightly elevated benzene levels (25 µg/L in December 2021) and showed the presence of residual NAPL sheens during most sampling events. Toluene, ethylbenzene, and xylene concentrations are well below applicable WQCC standards.

MW-9 – dissolved phase concentrations have remained consistently above WQCC standards, and the well has had the intermittent presence of residual NAPL throughout the year, with measurable NAPL thicknesses returning in June 2021 (0.04 ft) for the first time since July 2019 (0.01 ft). Both events were conducted when groundwater elevations were at the seasonal low points.

3.2 Recommendations

Based on site data, as well as verbal communications between Logos and NMOCD, it is recommended to plug and abandon (P&A) five of the site monitor wells, including MW-1, MW-2, MW-5, MW-7 and MW-8. MW-6 will remain open for groundwater gauging to assist in calculation of gradient magnitude and direction.

Quarterly monitoring and sampling should continue at MW-3, MW-4, and MW-9 with laboratory analysis of full list volatile organics per USEPA Method 8260. MW-6 should be gauged for depth to groundwater.

3.3 Scheduled Site Activities

AES will submit well plugging plans to the New Mexico Office of the State Engineer (NMOSE) and prepare a schedule for well P&A. AES will also continue with quarterly groundwater monitoring and sampling of MW-3, MW-4, and MW-9 along with gauging of MW-9.

If you have any questions about this report or site conditions, please feel free to contact Elizabeth McNally at (505) 564-2281.

Respectfully Submitted,

David J. Reese
Environmental Scientist

Elizabeth McNally, P.E.

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Attachments:

Table 1. Groundwater Measurements and Water Quality Data
Table 2. Groundwater Laboratory Analytical Results
Figure 1. Topographic Site Location Map
Figure 1A. Aerial Site Location Map
Figure 2. Site Plan with Monitor Well Locations
Figure 3. 2021 Groundwater Elevation Contours
Figure 4. 2021 Groundwater Contaminant Concentrations
Figure 5. 2021 Dissolved Benzene Concentration Contours
Figure 6. 2021 Dissolved Toluene Concentration Contours
Figure 7. 2021 Dissolved Xylenes Concentration Contours
Graphs 1 through 3 – Groundwater Elevations and Contaminant Concentrations over Time, MW-3, MW-4, and MW-9
NMOCD Correspondence (March, June, and December Sampling Notifications)
Groundwater Sample Collection Forms – March, June, September, and December 2021
Laboratory Analytical Reports (Hall Nos. 2103693, 2106655, 2109B86, 2112795)

Attachments

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-1	4-Jan-00	5455.49		41.87		5413.62		14.6	0.865	6.95	-59.6
MW-1	23-Aug-13	5455.49		37.50		5417.99		15.1	1.661	6.86	84.9
MW-1	11-Nov-13	5455.49		36.97		5418.52		13.7	*NM*		
MW-1	14-Nov-13	5455.49		36.63		5418.86		13.9	0.916	7.12	*NM*
MW-1	10-Feb-14	5455.49		40.10		5415.39		14.1	0.818	7.54	*NM*
MW-1	27-May-14	5455.49		42.36		5413.13		16.2	0.920	7.06	-80.0
MW-1	18-Dec-14	5455.49		37.97		5417.52		13.1	0.984	7.35	73.3
MW-1	3-Jun-15	5455.49		42.02		5413.47		18.4	0.909	6.73	-151.3
MW-1	17-Sep-15	5455.49		38.86		5416.63		15.3	1.516	7.02	-129.4
MW-1	8-Dec-15	5455.49		38.45		5417.04		14.5	0.773	7.50	-238.2
MW-1	10-Mar-16	5455.49		41.62		5413.87		14.8	0.969	7.02	-108.1
MW-1	15-Jun-16	5455.49		42.90		5412.59		15.9	0.953	6.82	-229.7
MW-1	28-Sep-16	5456.49		39.00		5417.49		15.4	0.846	7.18	-107.6
MW-1	20-Dec-16	5457.49		39.80		5417.69		14.5	0.868	7.45	-116.6
MW-1	14-Mar-17	5457.49		42.56		5414.93		15.0	0.895	7.79	-175.9
MW-1	16-Jun-17	5457.49		43.99		5413.50		16.0	0.874	6.87	-148.9
MW-1	15-Sep-17	5457.49		40.96		5416.53		15.5	0.963	6.82	-167.5
MW-1	12-Dec-17	5457.49		41.30		5416.19		14.4	0.889	7.04	-129.5
MW-1	9-Mar-18	5457.49		43.85		5413.64		14.0	0.770	7.01	-85.4
MW-1	5-Jun-18	5457.49		44.53		5412.96		15.7	1.05	6.75	-187.5
MW-1	5-Sep-18	5457.49		39.99		5417.50		16.1	0.91	6.72	-126.8

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San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-1	6-Dec-18	5457.49		37.30		5420.19		14.7	0.86	7.20	-146.7
MW-1	7-Mar-19	5457.49		41.36		5416.13		14.7	0.770	7.14	-93.7
MW-1	2-Jul-19	5457.49		41.32		5416.17		15.7	1.08	6.73	-83.4
MW-1	24-Sep-19	5457.49		37.70		5419.79		15.0	0.965	6.11	-79.8
MW-1	19-Dec-19	5457.49		38.23		5419.26		14.3	1.148	7.12	-74.8
MW-1	20-Mar-20	5457.49		41.52		5415.97		14.7	0.887	7.02	-148.9
MW-1	25-Jun-20	5457.49		40.95		5416.54		15.9	1.10	6.94	-61.6
MW-1	1-Oct-20	5457.49		37.51		5419.98		15.2	0.824	6.93	-55.5
MW-1	15-Dec-20	5457.49		38.95		5418.54		14.1	0.777	6.60	-95.7
MW-1	12-Mar-21	5457.49		41.85		5415.64		14.7	0.751	7.43	-130.8
MW-1	10-Jun-21	5457.49		42.38		5415.11		*NM - Gauge Only*			
MW-1	21-Sep-21	5457.49		38.36		5419.13		*NM - Gauge Only*			
MW-1	9-Dec-21	5457.49		39.22		5418.27		14.5	0.769	6.5	-38.2
MW-2	6-May-13	5452.05		38.48		5413.57		16.9	0.542	7.44	-18.6
MW-2	23-Aug-13	5452.05		34.29		5417.76		16.3	1.124	7.19	52.5
MW-2	11-Nov-13	5452.05		33.35		5418.70		13.5	*NM*		
MW-2	10-Feb-14	5452.05		36.71		5415.34		14.9	0.537	7.62	*NM*
MW-2	27-May-14	5452.05		38.83		5413.22		*NM*			
MW-2	18-Dec-14	5452.05		34.45		5417.60		12.4	0.676	7.46	-100.1
MW-2	3-Jun-15	5452.05		38.09		5413.96		*NM*			

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MW-2	17-Sep-15	5452.05		35.46		5416.59		*NM - Gauge Only*			
MW-2	8-Dec-15	5452.05		34.95		5417.10		*NM - Gauge Only*			
MW-2	10-Mar-16	5452.05		38.35		5413.70		*NM - Gauge Only*			
MW-2	15-Jun-16	5452.05		DRY		DRY		*NM - Gauge Only*			
MW-2	28-Sep-16	5452.05		35.70		5416.35		*NM - Gauge Only*			
MW-2	20-Dec-16	5452.05		36.22		5415.83		*NM - Gauge Only*			
MW-2	14-Mar-17	5452.05		39.25		5412.80		*NM - Gauge Only*			
MW-2	16-Jun-17	5452.05		DRY		DRY		*NM - Gauge Only*			
MW-2	15-Sep-17	5452.05		37.69		5414.36		*NM - Gauge Only*			
MW-2	12-Dec-17	5452.05		37.93		5414.12		*NM - Gauge Only*			
MW-2	9-Mar-18	5452.05		DRY		DRY		*NM - Gauge Only*			
MW-2	5-Jun-18	5452.05		DRY		DRY		*NM - Gauge Only*			
MW-2	5-Sep-18	5452.05		36.91		5415.14		*NM - Gauge Only*			
MW-2	6-Dec-18	5452.05		DRY		DRY		*NM - Gauge Only*			
MW-2	7-Mar-19	5452.05		38.08		5413.97		*NM - Gauge Only*			
MW-2	2-Jul-19	5452.05		37.79		5414.26		*NM - Gauge Only*			
MW-2	24-Sep-19	5452.05		34.31		5417.74		*NM - Gauge Only*			
MW-2	19-Dec-19	5452.05		34.76		5417.29		*NM - Gauge Only*			
MW-2	20-Mar-20	5452.05		38.22		5413.83		*NM - Gauge Only*			
MW-2	25-Jun-20	5452.05		37.64		5414.41		*NM - Gauge Only*			
MW-2	1-Oct-20	5452.05		39.98		5412.07		*NM - Gauge Only*			

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Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-2	15-Dec-20	5452.05		35.12		5416.93		*NM - Gauge Only*			
MW-2	12-Mar-21	5452.05		38.69		5413.36		*NM - Gauge Only*			
MW-2	10-Jun-21	5452.05		38.89		5413.16		*NM - Gauge Only*			
MW-2	21-Sep-21	5452.05		35.01		5417.04		*NM - Gauge Only*			
MW-2	9-Dec-21	5452.05		35.85		5416.20		*NM - Gauge Only*			
MW-3	6-May-13	5453.98		40.47		5413.51		14.8	1.575	6.70	-43.5
MW-3	23-Aug-13	5453.98		36.16		5417.82		14.8	1.783	6.70	-48.7
MW-3	11-Nov-13	5453.98		35.53		5418.45		13.7	*NM*		
MW-3	14-Nov-13	5453.98	35.61	35.62	0.01	5418.36	5418.37	13.6	1.393	6.89	*NM*
MW-3	10-Feb-14	5453.98		38.70		5415.28		14.2	0.993	7.17	*NM*
MW-3	27-May-14	5453.98		40.94		5413.04		16.4	0.935	6.78	-42.2
MW-3	18-Dec-14	5453.98		36.56		5417.42		12.6	1.239	7.40	25.8
MW-3	3-Jun-15	5453.98		40.54		5413.44		15.1	0.853	6.65	-79.9
MW-3	17-Sep-15	5453.98		37.55		5416.43		15.6	1.653	6.60	-78.6
MW-3	8-Dec-15	5453.98		37.02		5416.96		14.7	1.003	7.06	-251.6
MW-3	10-Mar-16	5453.98		40.25		5413.73		15.0	1.503	6.61	-71.2
MW-3	15-Jun-16	5453.98		41.56		5412.42		15.9	1.101	6.58	-114.5
MW-3	28-Sep-16	5453.98		37.68		5416.30		15.8	1.227	6.78	-83.2
MW-3	20-Dec-16	5453.98		38.36		5415.62		15.1	1.403	7.06	-111.1
MW-3	14-Mar-17	5453.98		41.20		5412.78		15.3	1.136	7.50	-136.9

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-3	16-Jun-17	5453.98		42.11		5411.87		15.8	1.208	6.90	-85.9
MW-3	15-Sep-17	5453.98		39.68		5414.30		15.7	1.221	6.80	-97.5
MW-3	12-Dec-17	5453.98		39.91		5414.07		14.7	1.410	6.84	-113.3
MW-3	9-Mar-18	5453.98		42.46		5411.52		15.4	0.940	6.88	-96.2
MW-3	5-Jun-18	5453.98		43.12		5410.86		16.7	1.219	6.80	-129.4
MW-3	5-Sep-18	5453.98		38.70		5415.28		16.0	1.19	6.50	-73.1
MW-3	6-Dec-18	5453.98		37.00		5416.98		15.2	1.33	6.95	-121.3
MW-3	7-Mar-19	5453.98		40.01		5413.97		15.2	1.014	6.98	-77.2
MW-3	2-Jul-19	5453.98		39.80		5414.18		15.9	1.176	6.23	-80.4
MW-3	24-Sep-19	5453.98		36.35		5417.63		15.3	1.106	6.24	-76.5
MW-3	19-Dec-19	5453.98		36.81		5417.17		14.8	1.544	6.90	-23.7
MW-3	20-Mar-20	5453.98		40.14		5413.84		14.8	1.067	6.97	70.7
MW-3	25-Jun-20	5453.98		39.54		5414.44		15.7	1.28	6.66	-76.2
MW-3	1-Oct-20	5453.98		36.18		5417.80		15.5	0.982	6.70	-72.0
MW-3	15-Dec-20	5453.98		37.58		5416.40		15.0	1.105	6.39	-93.2
MW-3	12-Mar-21	5453.98		40.47		5413.51		15.2	1.066	6.77	-94.9
MW-3	10-Jun-21	5453.98		41.06		5412.92		15.8	1.085	6.89	-83.9
MW-3	21-Sep-21	5453.98		37.14		5416.84		15.8	1.020	6.76	-75.4
MW-3	9-Dec-21	5453.98		37.80		5416.18		*NM - Slight Sheen*			
MW-4	6-May-13	5453.72		40.17		5413.55		14.9	1.123	7.03	-28.7

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-4	23-Aug-13	5453.72		35.93		5417.79		15.3	1.409	6.80	-63.0
MW-4	11-Nov-13	5453.72		35.20		5418.52		14.5	*NM*		
MW-4	14-Nov-13	5453.72		35.07		5418.65		14.4	0.936	7.14	*NM*
MW-4	10-Feb-14	5453.72		38.41		5415.31		14.3	0.920	7.32	*NM*
MW-4	27-May-14	5453.72		40.47		5413.25		15.3	0.797	7.14	-31.5
MW-4	18-Dec-14	5453.72		35.97		5417.75		13.1	0.960	7.44	58.7
MW-4	3-Jun-15	5453.72		39.90		5413.82		17.0	0.791	6.67	-58.3
MW-4	17-Sep-15	5453.72		37.05		5416.67		15.7	1.397	6.77	-84.3
MW-4	8-Dec-15	5453.72		36.47		5417.25		15.1	0.777	7.42	-174.4
MW-4	10-Mar-16	5453.72		39.85		5413.87		15.0	0.985	6.90	-90.7
MW-4	15-Jun-16	5453.72		41.09		5412.63		16.5	0.903	6.48	-75.4
MW-4	28-Sep-16	5453.72		37.14		5416.58		15.4	1.163	6.85	-78.6
MW-4	20-Dec-16	5453.72		37.91		5415.81		15.0	0.999	7.33	-123.3
MW-4	14-Mar-17	5453.72		40.79		5412.93		15.0	1.003	7.53	-71.4
MW-4	16-Jun-17	5453.72		41.50		5412.22		16.7	0.845	6.91	-85.8
MW-4	15-Sep-17	5453.72		39.15		5414.57		15.6	1.160	6.90	-130.9
MW-4	12-Dec-17	5453.72		39.47		5414.25		14.5	1.064	6.98	-111.0
MW-4	9-Mar-18	5453.72		42.08		5411.64		15.1	0.870	6.89	-111.9
MW-4	5-Jun-18	5453.72	43.55	43.62	0.07	5410.10	5410.15	*NM - 0.07 ft NAPL*			
MW-4	5-Sep-18	5453.72	38.21	38.21		5415.51		*NM - NAPL SHEEN*			
MW-4	6-Dec-18	5453.72	36.49	36.49		5417.23		*NM - NAPL SHEEN*			

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-4	7-Mar-19	5453.72	39.64	39.64		5414.08		*NM - NAPL SHEEN*			
MW-4	2-Jul-19	5453.72	39.41	39.42	0.01	5414.30	5414.31	*NM - NAPL SHEEN*			
MW-4	24-Sep-19	5453.72	35.99	36.00	0.01	5417.72	5417.73	*NM - NAPL SHEEN*			
MW-4	19-Dec-19	5453.72		36.09		5417.63		14.8	1.05	7.07	-1.5
MW-4	20-Mar-20	5453.72		39.75		5413.97		*NM - SHEEN*			
MW-4	25-Jun-20	5453.72		38.90		5414.82		*NM - SHEEN*			
MW-4	1-Oct-20	5453.72		35.55		5418.17		*NM - SHEEN*			
MW-4	15-Dec-20	5453.72		37.11		5416.61		*NM - SHEEN*			
MW-4	12-Mar-21	5453.72		40.08		5413.64		*NM - SHEEN*			
MW-4	10-Jun-21	5453.72		40.52		5413.20		18.47	0.98	6.71	-99.0
MW-4	21-Sep-21	5453.72	36.55	36.55		5417.17		*NM - NAPL SHEEN*			
MW-4	9-Dec-21	5453.72	37.40	37.40		5416.32		*NM - NAPL SHEEN*			
MW-5	23-Aug-13	5453.77		36.00		5417.77		15.1	1.686	6.82	113.2
MW-5	11-Nov-13	5453.77		35.44		5418.33		13.2	*NM*		
MW-5	10-Feb-14	5453.77		38.45		5415.32		13.4	0.908	7.46	*NM*
MW-5	27-May-14	5453.77		40.75		5413.02		15.8	1.007	7.21	63.8
MW-5	18-Dec-14	5453.77		36.30		5417.47		12.7	1.249	7.30	62.8
MW-5	3-Jun-15	5453.77		40.47		5413.30		16.8	1.136	6.25	132.0
MW-5	17-Sep-15	5453.77		37.42		5416.35		14.9	1.882	6.45	44.7
MW-5	8-Dec-15	5453.77		36.84		5416.93		14.1	0.902	7.35	-267.2

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-5	10-Mar-16	5453.77		39.99		5413.78		14.4	1.135	6.65	72.6
MW-5	15-Jun-16	5453.77		41.38		5412.39		15.0	1.121	6.33	150.2
MW-5	28-Sep-16	5453.77		37.60		5417.19		14.8	1.018	6.69	20.6
MW-5	13-Oct-16	5453.77		36.58		5415.57		15.3	1.016	6.80	50.9
MW-5	20-Dec-16	5453.77		38.20		5415.57		14.3	1.097	6.97	132.1
MW-5	14-Mar-17	5453.77		40.94		5412.83		14.6	1.138	7.20	47.2
MW-5	16-Jun-17	5453.77		41.99		5411.78		15.9	1.150	6.71	89.9
MW-5	22-Sep-17	5453.77		39.32		5414.45		14.9	1.154	6.74	37.9
MW-5	12-Dec-17	5453.77		39.71		5414.06		14.1	1.156	6.76	-49.4
MW-5	9-Mar-18	5453.77		42.20		5411.57		14.4	1.030	6.82	30.3
MW-5	5-Jun-18	5453.77		43.02		5410.75		15.7	1.26	6.71	28.2
MW-5	5-Sep-18	5453.77		38.55		5415.22		15.5	0.551	6.75	118.7
MW-5	6-Dec-18	5453.77		36.76		5417.01		13.8	1.14	7.16	190.7
MW-5	7-Mar-19	5453.77		39.75		5414.02		14.6	0.901	7.14	216.1
MW-5	12-Jul-19	5453.77		38.52		5415.25		15.1	0.981	6.96	149.5
MW-5	24-Sep-19	5453.77		36.15		5417.62		14.4	0.898	6.04	161.5
MW-5	19-Dec-19	5453.77		*NM - Well Frozen*							
MW-5	20-Mar-20	5453.77		39.86		5413.91		13.7	0.852	7.01	188.4
MW-5	25-Jun-20	5453.77		39.45		5414.32		15.0	1.10	6.67	227.3
MW-5	1-Oct-20	5453.77		36.16		5417.61		14.5	0.889	6.70	195.4
MW-5	15-Dec-20	5453.77		37.35		5416.42		14.0	0.938	7.07	198.7

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-5	12-Mar-21	5453.77		40.23		5413.54		*NM - Gauge only*			
MW-5	10-Jun-21	5453.77		40.95		5412.82		*NM - Gauge only*			
MW-5	21-Sep-21	5453.77		37.04		5416.73		*NM - Gauge only*			
MW-5	9-Dec-21	5453.77		37.65		5416.12		14.3	1.160	6.29	54.4
MW-6	23-Aug-13	5452.29		34.56		5417.73		15.5	1.638	7.01	108.8
MW-6	11-Nov-13	5452.29		33.84		5418.45		13.2	*NM*		
MW-6	10-Feb-14	5452.29		37.06		5415.23		13.2	0.922	7.38	*NM*
MW-6	27-May-14	5452.29		39.25		5413.04		15.6	1.018	7.64	143.1
MW-6	18-Dec-14	5452.29		34.79		5417.50		12.7	1.098	7.34	71.7
MW-6	3-Jun-15	5452.29		38.81		5413.48		16.7	0.900	6.46	81.6
MW-6	17-Sep-15	5452.29		35.94		5416.35		14.9	1.431	6.92	-36.7
MW-6	8-Dec-15	5452.29		35.34		5416.95		14.2	0.931	7.65	-219.3
MW-6	10-Mar-16	5452.29		38.62		5413.67		*NM - Gauge only*			
MW-6	15-Jun-16	5452.29		39.92		5412.37		*NM - Gauge only*			
MW-6	28-Sep-16	5452.29		36.12		5416.17		*NM - Gauge only*			
MW-6	20-Dec-16	5452.29		36.73		5415.56		14.4	1.299	7.33	99.9
MW-6	14-Mar-17	5452.29		39.58		5412.71		*NM - Gauge only*			
MW-6	16-Jun-17	5452.29		40.42		5411.87		*NM - Gauge only*			
MW-6	22-Sep-17	5452.29		37.82		5414.47		*NM - Gauge only*			
MW-6	12-Dec-17	5452.29		38.31		5413.98		*NM - Gauge only*			

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-6	9-Mar-18	5452.29		40.81		5411.48		*NM - Gauge only*			
MW-6	5-Jun-18	5452.29		41.41		5410.88		*NM - Gauge only*			
MW-6	5-Sep-18	5452.29		37.18		5415.11		*NM - Gauge only*			
MW-6	6-Dec-18	5452.29		35.31		5416.98		*NM - Gauge only*			
MW-6	7-Mar-19	5452.29		38.39		5413.90		*NM - Gauge only*			
MW-6	12-Jul-19	5452.29		37.17		5415.12		*NM - Gauge only*			
MW-6	24-Sep-19	5452.29		34.73		5417.56		*NM - Gauge only*			
MW-6	19-Dec-19	5452.29		34.88		5417.41		*NM - Gauge only*			
MW-6	20-Mar-20	5452.29		38.49		5413.80		*NM - Gauge only*			
MW-6	25-Jun-20	5452.29		37.85		5414.44		*NM - Gauge only*			
MW-6	1-Oct-20	5452.29		34.81		5417.48		*NM - Gauge only*			
MW-6	15-Dec-20	5452.29		35.88		5416.41		*NM - Gauge only*			
MW-6	12-Mar-21	5452.29		38.86		5413.43		*NM - Gauge only*			
MW-6	10-Jun-21	5452.29		39.41		5412.88		*NM - Gauge only*			
MW-6	21-Sep-21	5452.29		35.56		5416.73		*NM - Gauge only*			
MW-6	9-Dec-21	5452.29		36.16		5416.13		*NM - Gauge only*			
MW-7	23-Aug-13	5454.98		37.11		5417.87		15.6	1.337	7.06	-3.6
MW-7	11-Nov-13	5454.98		36.42		5418.56		14.4	*NM*		
MW-7	10-Feb-14	5454.98		39.66		5415.32		14.5	0.698	7.50	*NM*
MW-7	27-May-14	5454.98		41.88		5413.10		17.1	0.711	6.65	-89.0

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-7	18-Dec-14	5454.98		37.47		5417.51		13.3	0.902	7.40	74.0
MW-7	3-Jun-15	5454.98		41.41		5413.57		16.2	0.742	6.58	-117.1
MW-7	17-Sep-15	5454.98		38.38		5416.60		15.2	1.255	6.71	-76.0
MW-7	8-Dec-15	5454.98		37.95		5417.03		14.7	0.709	7.56	-279.8
MW-7	10-Mar-16	5454.98		41.23		5413.75		14.6	0.806	7.07	-99.9
MW-7	15-Jun-16	5454.98		42.47		5412.51		15.5	0.760	6.78	-84.4
MW-7	13-Oct-16	5454.98		37.22		5417.76		15.6	0.765	7.15	-49.6
MW-7	20-Dec-16	5454.98		39.28		5415.70		14.4	0.808	7.39	-47.1
MW-7	14-Mar-17	5454.98		42.17		5412.81		14.8	0.756	7.67	-71.4
MW-7	16-Jun-17	5454.98		42.94		5412.04		*NM - Gauge only*			
MW-7	15-Sep-17	5454.98		40.44		5414.54		*NM - Gauge only*			
MW-7	12-Dec-17	5454.98		40.87		5414.11		*NM - Gauge only*			
MW-7	9-Mar-18	5454.98		43.42		5411.56		*NM - Gauge only*			
MW-7	5-Jun-18	5454.98		44.00		5410.98		*NM - Gauge only*			
MW-7	5-Sep-18	5454.98		39.51		5415.47		*NM - Gauge only*			
MW-7	6-Dec-18	5454.98		37.84		5417.14		*NM - Gauge only*			
MW-7	7-Mar-19	5454.98		40.95		5414.03		*NM - Gauge only*			
MW-7	2-Jul-19	5454.98		40.93		5414.05		*NM - Gauge only*			
MW-7	24-Sep-19	5454.98		37.18		5417.80		*NM - Gauge only*			
MW-7	19-Dec-19	5454.98		37.74		5417.24		*NM - Gauge only*			
MW-7	20-Mar-20	5454.98		41.13		5413.85		*NM - Gauge only*			

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-7	25-Jun-20	5454.98		40.34		5414.64		*NM - Gauge only*			
MW-7	1-Oct-20	5454.98		36.82		5418.16		*NM - Gauge only*			
MW-7	15-Dec-20	5454.98		38.39		5416.59		*NM - Gauge only*			
MW-7	12-Mar-21	5454.98		41.44		5413.54		*NM - Gauge only*			
MW-7	10-Jun-21	5454.98		41.82		5413.16		*NM - Gauge only*			
MW-7	21-Sep-21	5454.98		37.79		5417.19		*NM - Gauge only*			
MW-7	9-Dec-21	5454.98		38.68		5416.30		*NM - Gauge only*			
MW-8	23-Aug-13	5453.20		35.41		5417.79		16.1	1.261	7.29	89.4
MW-8	11-Nov-13	5453.20		34.31		5418.89		14.9	*NM*		
MW-8	10-Feb-14	5453.20		37.86		5415.34		14.5	0.552	8.01	*NM*
MW-8	27-May-14	5453.20		39.99		5413.21		16.1	0.622	6.93	67.0
MW-8	18-Dec-14	5453.20		35.51		5417.69		13.5	0.670	7.50	69.0
MW-8	3-Jun-15	5453.20		39.20		5414.00		17.2	0.652	6.95	114.2
MW-8	17-Sep-15	5453.20		36.55		5416.65		15.0	1.065	7.06	101.4
MW-8	8-Dec-15	5453.20		35.95		5417.25		14.6	0.532	8.09	-201.4
MW-8	10-Mar-16	5453.20		39.41		5413.79		*NM - Gauge only*			
MW-8	15-Jun-16	5453.20		40.65		5412.55		*NM - Gauge only*			
MW-8	28-Sep-16	5453.20		36.69		5416.51		*NM - Gauge only*			
MW-8	20-Dec-16	5453.20		37.24		5415.96		14.3	0.621	7.54	174.9
MW-8	14-Mar-17	5453.20		40.38		5412.82		*NM - Gauge only*			

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-8	16-Jun-17	5453.20		39.88		5413.32		*NM - Gauge only*			
MW-8	15-Sep-17	5453.20		38.61		5414.59		*NM - Gauge only*			
MW-8	12-Dec-17	5453.20		39.01		5414.19		*NM - Gauge only*			
MW-8	9-Mar-18	5453.20		41.69		5411.51		*NM - Gauge only*			
MW-8	5-Jun-18	5453.20		42.05		5411.15		*NM - Gauge only*			
MW-8	5-Sep-18	5453.20		37.77		5415.43		*NM - Gauge only*			
MW-8	6-Dec-18	5453.20		35.95		5417.25		*NM - Gauge only*			
MW-8	7-Mar-19	5453.20		39.20		5414.00		*NM - Gauge only*			
MW-8	2-Jul-19	5453.20		39.00		5414.20		*NM - Gauge only*			
MW-8	24-Sep-19	5453.20		35.34		5417.86		*NM - Gauge only*			
MW-8	19-Dec-19	5453.20		35.83		5417.37		*NM - Gauge only*			
MW-8	20-Mar-20	5453.20		38.51		5414.69		*NM - Gauge only*			
MW-8	25-Jun-20	5453.20		38.32		5414.88		*NM - Gauge only*			
MW-8	1-Oct-20	5453.20		34.75		5418.45		*NM - Gauge only*			
MW-8	15-Dec-20	5453.20		36.50		5416.70		*NM - Gauge only*			
MW-8	12-Mar-21	5453.20		39.67		5413.53		*NM - Gauge only*			
MW-8	10-Jun-21	5453.20		39.92		5413.28		*NM - Gauge only*			
MW-8	21-Sep-21	5453.20		35.84		5417.36		*NM - Gauge only*			
MW-8	9-Dec-21	5453.20		36.84		5416.36		*NM - Gauge only*			
MW-9	27-May-14	*NS*		44.47	0.02	--	--	*NM*			

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-9	18-Dec-14	*NS*		40.08		--		12.0	0.942	7.44	105.2
MW-9	3-Jun-15	*NS*		44.00		--		17.4	0.860	6.47	-76.1
MW-9	17-Sep-15	*NS*		41.01		--		16.5	1.438	6.64	-92.8
MW-9	8-Dec-15	*NS*		40.52		--		15.0	0.849	7.26	-166.4
MW-9	10-Mar-16	*NS*		43.78		--		15.5	1.048	6.67	-81.4
MW-9	15-Jun-16	*NS*		45.03		--		16.4	1.109	6.53	-89.3
MW-9	28-Sep-16	*NS*		41.09		--		15.9	1.047	6.87	-89.2
MW-9	20-Dec-16	*NS*		41.86		--		15.1	0.995	7.16	-92.4
MW-9	14-Mar-17	*NS*		44.72		--		15.8	1.046	7.55	-87.0
MW-9	16-Jun-17	*NS*	45.46	45.88	0.42	--	--	*NM - 0.42 ft NAPL*			
MW-9	15-Sep-17	*NS*	43.08	43.09	0.01	--	--	*NM - 0.01 ft NAPL*			
MW-9	12-Dec-17	*NS*	43.43	43.45	0.02	--	--	*NM - 0.02 ft NAPL*			
MW-9	9-Mar-18	*NS*	45.65	45.76	0.11	--	--	*NM - 0.11 ft NAPL*			
MW-9	5-Jun-18	*NS*	46.45	47.01	0.56	--	--	*NM - 0.56 ft NAPL*			
MW-9	5-Sep-18	*NS*	42.10	42.11	0.01	--	--	*NM - 0.01 ft NAPL*			
MW-9	6-Dec-18	*NS*	40.45	40.45		--	--	*NM - NAPL SHEEN*			
MW-9	7-Mar-19	*NS*	43.53	43.53		--	--	*NM - NAPL SHEEN*			
MW-9	2-Jul-19	*NS*	43.34	43.35	0.01	--	--	*NM - 0.01 ft NAPL*			
MW-9	24-Sep-19	*NS*	39.76	39.76	0.01	--	--	*NM - NAPL SHEEN*			
MW-9	19-Dec-19	*NS*	--	40.32		--	--	*NM - NAPL SHEEN*			
MW-9	20-Mar-20	*NS*	--	43.66		--	--	*NM - NAPL SHEEN*			

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL thickness (ft)	Water Level Elevation (ft amsl)	Corrected Water Level Elevation (ft amsl)	Temp. (˚C)	Specific Conduct. (mS)	pH	ORP (mV)
MW-9	25-Jun-20	*NS*	42.92	42.92		--	--	*NM - NAPL SHEEN*			
MW-9	1-Oct-20	*NS*	--	39.54		--	--	*NM - NAPL SHEEN*			
MW-9	15-Dec-20	*NS*	--	41.03		--	--	*NM - NAPL SHEEN*			
MW-9	12-Mar-21	*NS*	--	43.95		--	--	*NM - NAPL SHEEN*			
MW-9	10-Jun-21	*NS*	44.42	44.46	0.04	--	--	*NM - 0.04 ft NAPL*			
MW-9	21-Sep-21	*NS*	40.49	40.50	0.01	--	--	*NM - 0.01 ft NAPL*			
MW-9	9-Dec-21	*NS*	41.27	41.28	0.01	--	--	*NM - 0.01 ft NAPL*			

Notes: **NM - Not Measured**
NS - Not Surveyed (MW-9)
ORP - Oxidation Reduction Potential

TABLE 2
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)
Sample Method		EPA Method 8021B/8260B			
WQCC Standards		5	1,000	700	620
MW-1*	14-Mar-13	**24**	289	401	**3,290**
MW-1	6-May-13	<10	77	470	**3,900**
MW-1	23-Aug-13	<10	110	470	**4,000**
MW-1	11-Nov-13	<5.0	92	360	**3,200**
MW-1	14-Nov-13	<10	85	220	**2,300**
MW-1	10-Feb-14	<5.0	42	470	**4,100**
MW-1	27-May-14	<5.0	8.7	260	**1,700**
MW-1	18-Dec-14	<5.0	5.5	78	600
MW-1	3-Jun-15	<5.0	6.4	250	**1,100**
MW-1	17-Sep-15	<5.0	<5.0	240	580
MW-1	8-Dec-15	<5.0	<5.0	300	**2,100**
MW-1	10-Mar-16	<5.0	<5.0	520	**3,400**
MW-1	15-Jun-16	<5.0	<5.0	110	130
MW-1	28-Sep-16	<5.0	<5.0	120	400
MW-1	20-Dec-16	<1.0	<1.0	270	**1,400**
MW-1	14-Mar-17	<2.0	<2.0	130	**730**
MW-1	15-Jun-17	<2.0	<2.0	50	< 4.0
MW-1	15-Sep-17	1.6	<1.0	65	280
MW-1	12-Dec-17	1.8	<1.0	94	230
MW-1	9-Mar-18	<1.0	<1.0	17	2.2
MW-1	5-Jun-18	1.0	<1.0	22	14
MW-1	5-Sep-18	<1.0	<1.0	27	43
MW-1	6-Dec-18	4.2	5.5	110	260
MW-1	7-Mar-19	**6.4**	3.1	130	300
MW-1	2-Jul-19	1.5	<1.0	39	22
MW-1	24-Sep-19	1.9	4.2	54	160
MW-1	19-Dec-19	1.2	4.6	55	220
MW-1	20-Mar-20	<1.0	1.6	110	410
MW-1	25-Jun-20	<2.0	<2.0	47	75
MW-1	1-Oct-20	1.1	<2.0	110	84

TABLE 2
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)
Sample Method		EPA Method 8021B/8260B			
WQCC Standards		5	1,000	700	620
MW-1	15-Dec-20	<2.0	<2.0	140	420
MW-1	12-Mar-21	<2.0	<2.0	47	220
MW-3	6-May-13	**16,000**	**27,000**	**1,000**	**9,500**
MW-3	23-Aug-13	**18,000**	**27,000**	**1,300**	**12,000**
MW-3	11-Nov-13	**2,300**	320	170	**910**
MW-3	14-Nov-13	**1,500**	280	54	550
MW-3	10-Feb-14	**9,100**	**8,800**	670	**5,300**
MW-3	27-May-14	**14,000**	**22,000**	**860**	**6,300**
MW-3	18-Dec-14	**1,500**	**1,000**	61	610
MW-3	3-Jun-15	**14,000**	**16,000**	**860**	**7,800**
MW-3	17-Sep-15	**13,000**	**16,000**	**970**	**9,100**
MW-3	8-Dec-15	**10,000**	**8,700**	620	**6,100**
MW-3	10-Mar-16	**10,000**	**7,200**	**760**	**7,300**
MW-3	15-Jun-16	**15,000**	**16,000**	**900**	**8,700**
MW-3	28-Sep-16	**10,000**	**15,000**	**910**	**11,000**
MW-3	20-Dec-16	**13,000**	**17,000**	**940**	**9,500**
MW-3	14-Mar-17	**13,000**	**6,300**	**860**	**8,500**
MW-3	15-Jun-17	**14,000**	**13,000**	**820**	**7,700**
MW-3	15-Sep-17	**12,000**	**16,000**	**950**	**10,000**
MW-3	12-Dec-17	**12,000**	**16,000**	**850**	**9,200**
MW-3	9-Mar-18	**14,000**	**14,000**	**880**	**8,700**
MW-3	5-Jun-18	**17,000**	**15,000**	**970**	**9,100**
MW-3	5-Sep-18	**53**	42	2.9	43
MW-3	6-Dec-18	**10,000**	**10,000**	570	**8,700**
MW-3	7-Mar-19	**8,400**	**5,400**	510	**6,800**
MW-3	2-Jul-19	**7,500**	**4,100**	310	**6,500**
MW-3	24-Sep-19	**9,600**	**4,600**	680	**8,400**
MW-3	19-Dec-19	**2,300**	530	190	**1,700**
MW-3	20-Mar-20	**6,900**	**3,000**	440	**4,100**

TABLE 2
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)
Sample Method		EPA Method 8021B/8260B			
WQCC Standards		5	1,000	700	620
MW-3	25-Jun-20	**13,000**	**16,000**	**830**	**8,200**
MW-3	1-Oct-20	**10,000**	**12,000**	**800**	**9,200**
MW-3	15-Dec-20	**11,000**	**8,300**	**770**	**9,100**
MW-3	12-Mar-21	**9,700**	**8,900**	690	**7,600**
MW-3	10-Jun-21	**14,000**	**20,000**	**980**	**8,900**
MW-3	21-Sep-21	**12,000**	**13,000**	**720**	**9,100**
MW-3	9-Dec-21	**12,000**	**11,000**	**740**	**9,300**
MW-4	6-May-13	**8,500**	**29,000**	**1,100**	**10,000**
MW-4	23-Aug-13	**15,000**	**28,000**	**1,200**	**11,000**
MW-4	11-Oct-13	**9,300**	**16,000**	**720**	**6,800**
MW-4	11-Nov-13	**89**	87	8.8	68
MW-4	14-Nov-13	<5.0	140	350	**3,500**
MW-4	10-Feb-14	**1,300**	**1,100**	150	**1,300**
MW-4	27-May-14	**610**	**3,300**	220	**1,800**
MW-4	18-Dec-14	**28**	35	5.5	46
MW-4	3-Jun-15	**2,400**	**7,000**	320	**2,400**
MW-4	17-Sep-15	**6,400**	**22,000**	**700**	**5,900**
MW-4	8-Dec-15	**22**	39	7.6	70
MW-4	10-Mar-16	**100**	290	97	430
MW-4	15-Jun-16	**210**	270	120	550
MW-4	28-Sep-16	**3,400**	**4,600**	380	**2,700**
MW-4	20-Dec-16	**90**	68	34	230
MW-4	14-Mar-17	**180**	190	87	530
MW-4	15-Jun-17	**550**	350	120	**740**
MW-4	15-Sep-17	**2,400**	**4,300**	300	**2,700**
MW-4	12-Dec-17	**2,300**	**4,600**	290	**2,400**
MW-4	9-Mar-18	**1,600**	**2,900**	240	**2,400**
MW-4	5-Jun-18	0.07 FEET NAPL			
MW-4	5-Sep-18	**83**	**15,000**	19	180

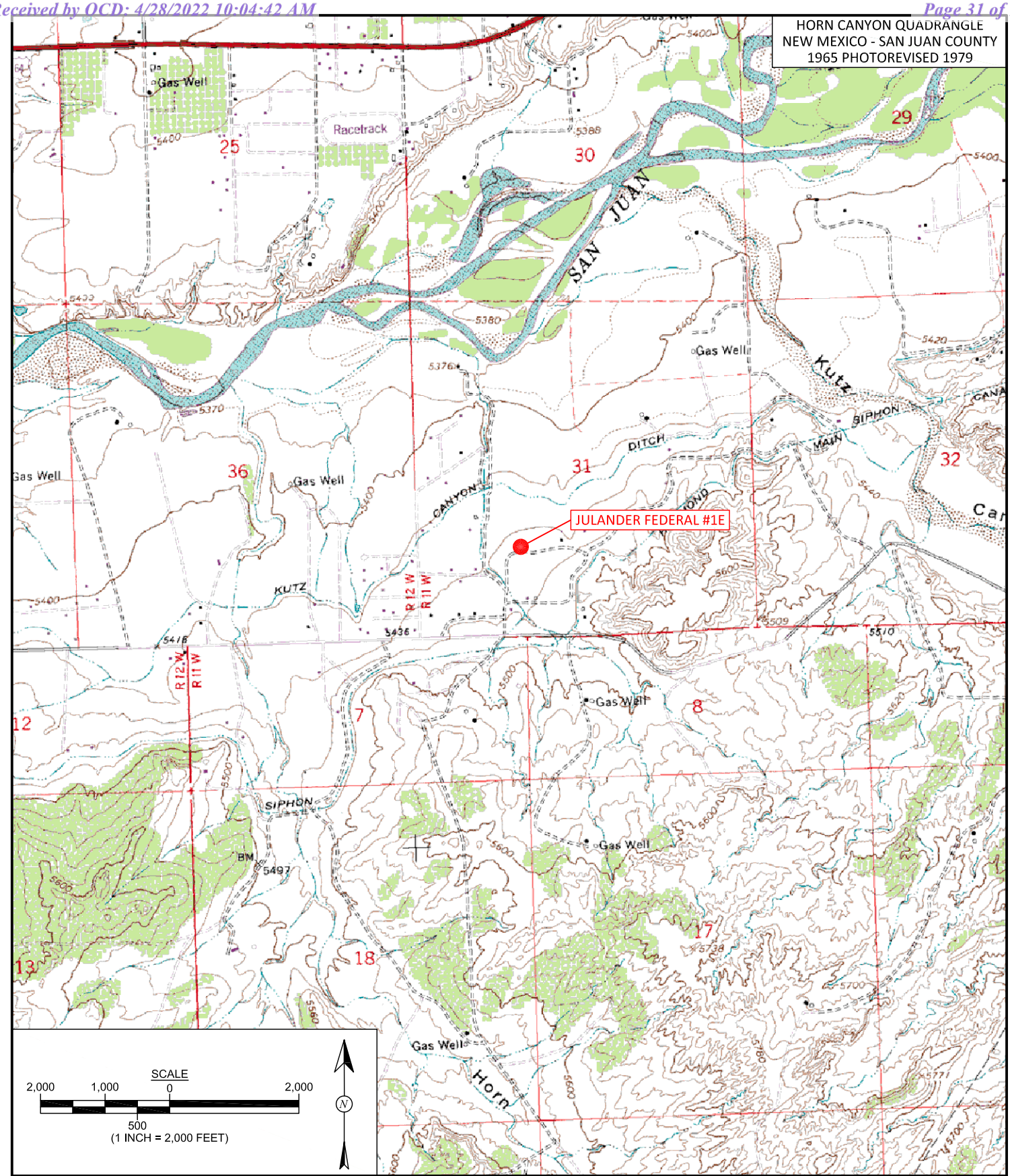
TABLE 2
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)
Sample Method		EPA Method 8021B/8260B			
WQCC Standards		5	1,000	700	620
MW-4	6-Dec-18	**67**	230	41	440
MW-4	7-Mar-19	**480**	**2,700**	310	**2,600**
MW-4	2-Jul-19	**1,100**	**2,800**	270	**3,200**
MW-4	24-Sep-19	**2,600**	**9,000**	490	**4,900**
MW-4	19-Dec-19	2.3	7.7	12	100
MW-4	20-Mar-20	**70**	290	54	340
MW-4	25-Jun-20	**230**	180	50	430
MW-4	1-Oct-20	**13**	7.6	7.4	51
MW-4	15-Dec-20	**11**	<1.0	6.9	31
MW-4	12-Mar-21	3.7	6.6	<1.0	74
MW-4	10-Jun-21	**150**	47	26	330
MW-4	21-Sep-21	**870**	**1,400**	100	**840**
MW-4	9-Dec-21	**25**	<10	21	140
MW-9	27-May-14	0.02 FEET NAPL			
MW-9	18-Dec-14	**6,600**	**17,000**	**750**	**7,400**
MW-9	3-Jun-15	**4,000**	**13,000**	610	**5,600**
MW-9	17-Sep-15	**6,400**	**13,000**	560	**5,000**
MW-9	8-Dec-15	**9,600**	**17,000**	620	**5,600**
MW-9	10-Mar-16	**9,600**	**18,000**	690	**6,800**
MW-9	15-Jun-16	**6,800**	**13,000**	620	**6,000**
MW-9	28-Sep-16	**8,600**	**17,000**	680	**7,100**
MW-9	20-Dec-16	**10,000**	**21,000**	**840**	**7,700**
MW-9	14-Mar-17	**9,300**	**17,000**	**710**	**7,000**
MW-9	15-Jun-17	0.42 FEET NAPL			
MW-9	15-Sep-17	0.01 FEET NAPL			
MW-9	12-Dec-17	0.02 FEET NAPL			
MW-9	9-Mar-18	0.11 FEET NAPL			
MW-9	5-Jun-18	0.56 FEET NAPL			
MW-9	5-Sep-18	**9,400**	**31,000**	**1,300**	**11,000**

TABLE 2
SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS
Logos Julander Federal #1E
San Juan County, New Mexico

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)
Sample Method		EPA Method 8021B/8260B			
WQCC Standards		5	1,000	700	620
MW-9	6-Dec-18	7,400	24,000	1,100	11,000
MW-9	7-Mar-19	8,400	25,000	1,100	9,800
MW-9	2-Jul-19	7,000	21,000	1,000	9,800
MW-9	24-Sep-19	9,400	31,000	1,300	13,000
MW-9	19-Dec-19	9,100	27,000	1,000	10,000
MW-9	20-Mar-20	5,900	19,000	1,100	11,000
MW-9	25-Jun-20	7,200	23,000	1,200	12,000
MW-9	1-Oct-20	10,000	29,000	1,200	13,000
MW-9	15-Dec-20	7,800	20,000	1,000	11,000
MW-9	12-Mar-21	6,300	17,000	930	9,000
MW-9	10-Jun-21	9,400	29,000	1,600	14,000
MW-9	21-Sep-21	8,600	24,000	1,100	12,000
MW-9	9-Dec-21	6,300	14,000	950	9,100

Notes: *Sample collected and analyzed by Envirotech, Inc.



DRAWN BY: C. Lameman	**DATE DRAWN:** November 16, 2018
REVISIONS BY: C. Lameman	**DATE REVISED:** February 8, 2022
CHECKED BY: D. Reese	**DATE CHECKED:** February 8, 2022
APPROVED BY: E. McNally	**DATE APPROVED:** February 8, 2022

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
LOGOS RESOURCES, LLC
JULANDER FEDERAL #1E
NE¼ SW¼, SECTION 31, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.67936, W108.03514

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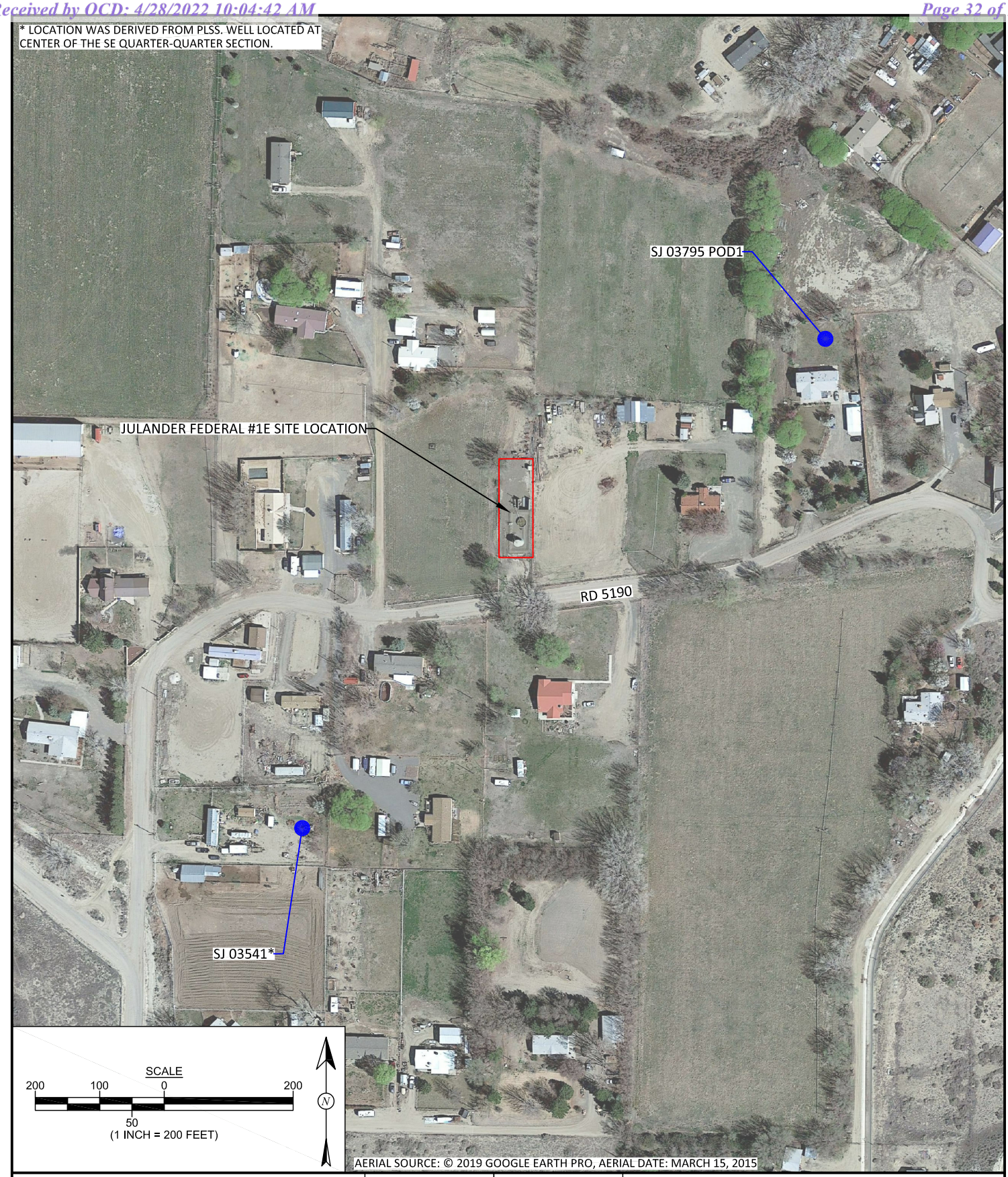

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DRAWN BY: C. Lameman	**DATE DRAWN:** February 6, 2017
REVISIONS BY: C. Lameman	**DATE REVISED:** February 8, 2022
CHECKED BY: D. Reese	**DATE CHECKED:** February 8, 2022
APPROVED BY: E. McNally	**DATE APPROVED:** February 8, 2022

FIGURE 1A

AERIAL SITE LOCATION MAP

LOGOS RESOURCES, LLC
JULANDER FEDERAL #1E
NE¼ SW¼, SECTION 31, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.67936, W108.03514

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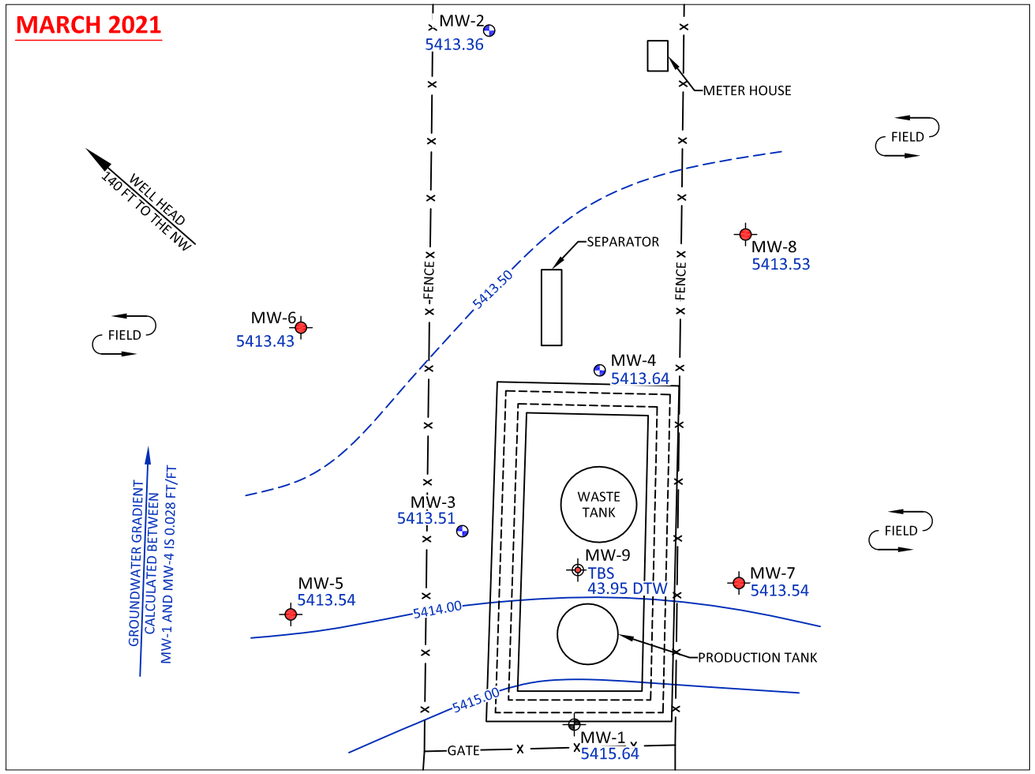
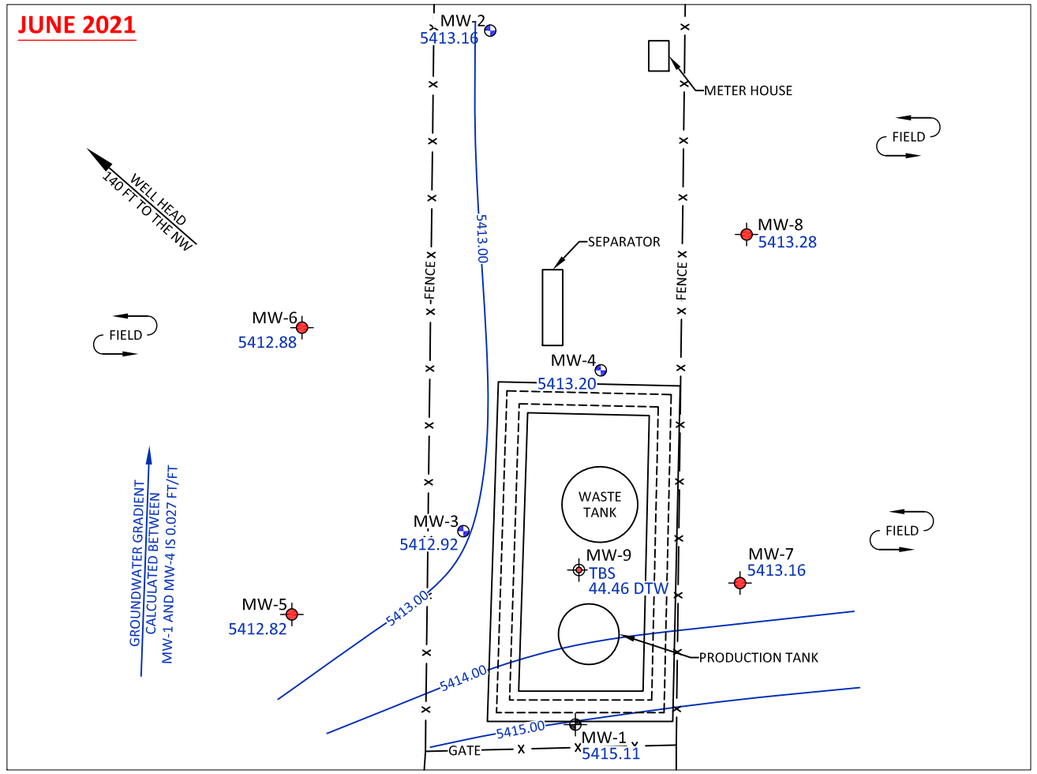
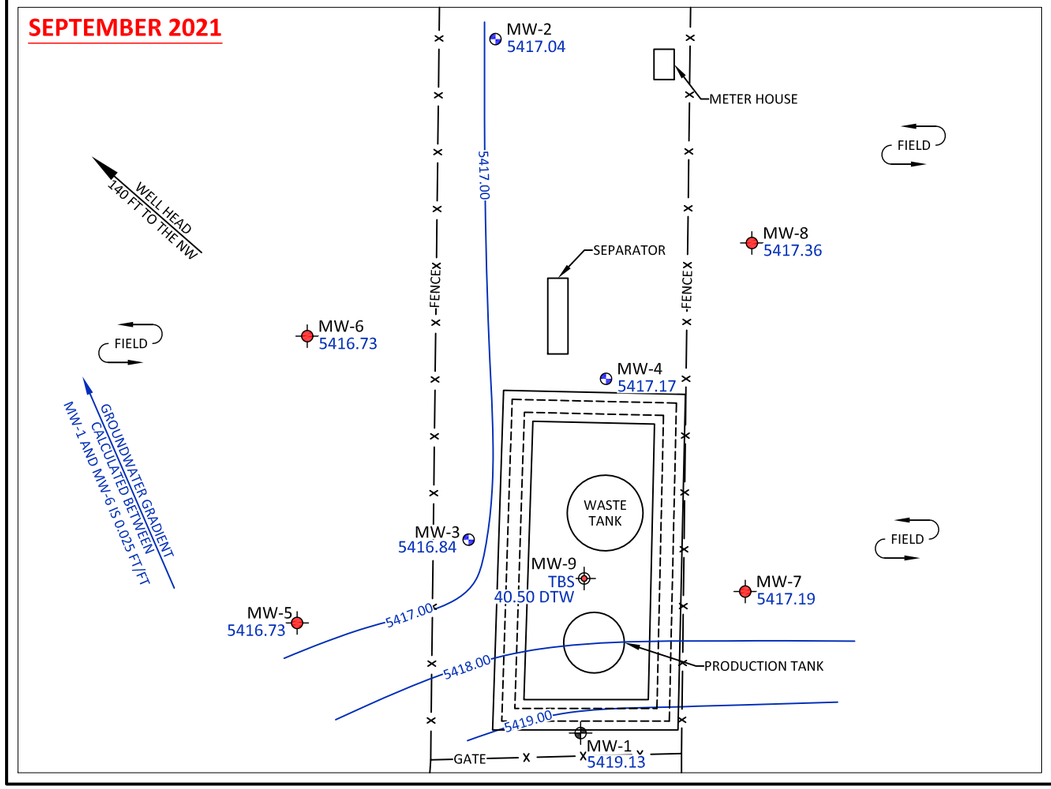
DRAWN BY: C. Lameman	**DATE DRAWN:** June 4, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** February 8, 2022
CHECKED BY: D. Reese	**DATE CHECKED:** February 8, 2022
APPROVED BY: E. McNally	**DATE APPROVED:** February 8, 2022

FIGURE 2

SITE PLAN WITH MONITOR WELL LOCATIONS
LOGOS RESOURCES, LLC
JULANDER FEDERAL #1E
NE¼ SW¼, SECTION 31, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.67936, W108.03514







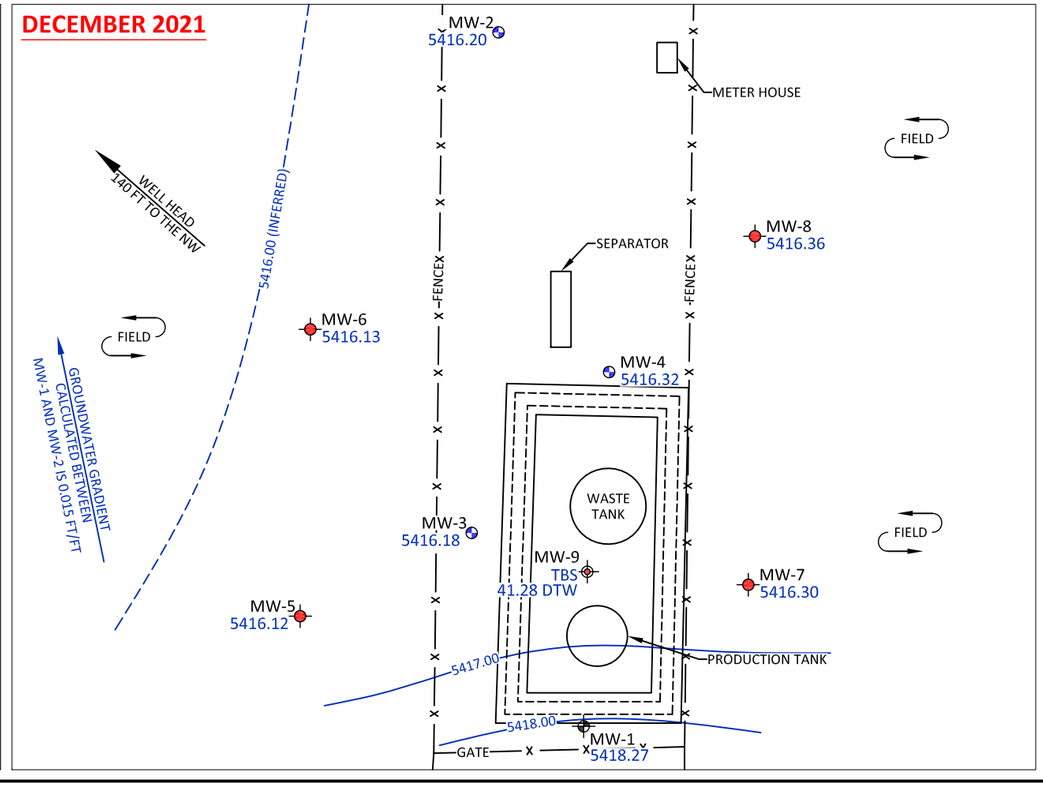


FIGURE 3

2021 GROUNDWATER ELEVATION CONTOURS
LOGOS RESOURCES, LLC
JULANDER FEDERAL #1E
NE¼ SW¼, SECTION 31, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.67936, W108.03514

animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

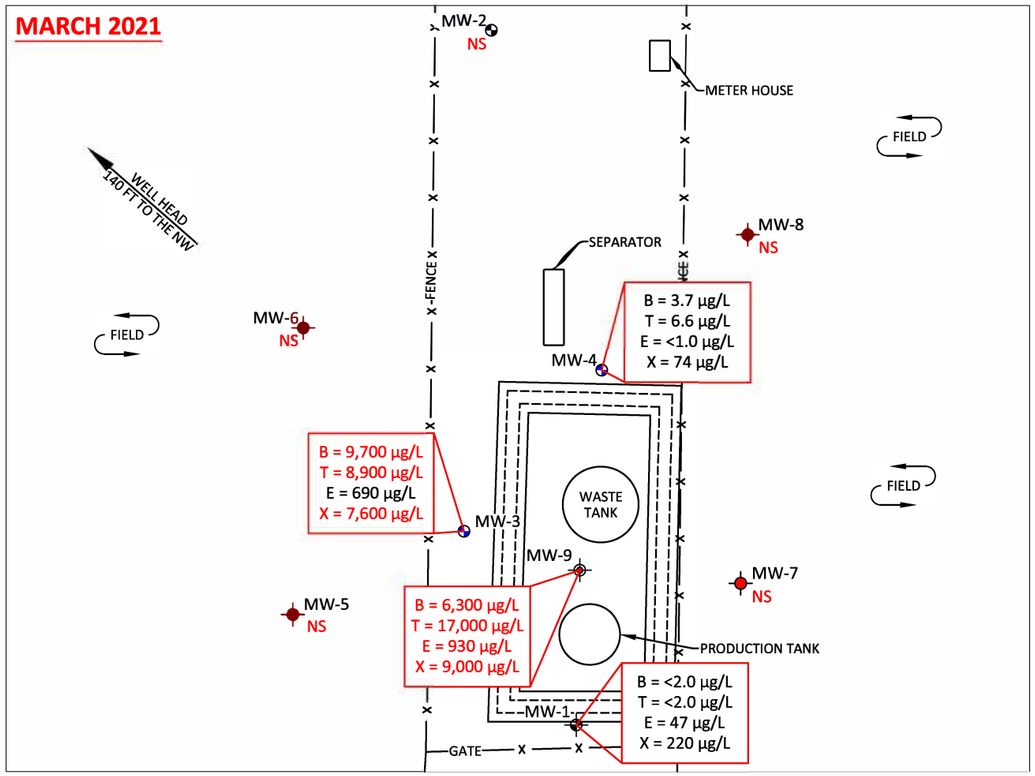
DRAWN BY:	DATE DRAWN:
C. Lameman	January 8, 2016
REVISIONS BY:	**DATE REVISED:**
C. Lameman	February 8, 2022
CHECKED BY:	**DATE CHECKED:**
D. Reese	February 8, 2022
APPROVED BY:	**DATE APPROVED:**
E. McNally	February 8, 2022

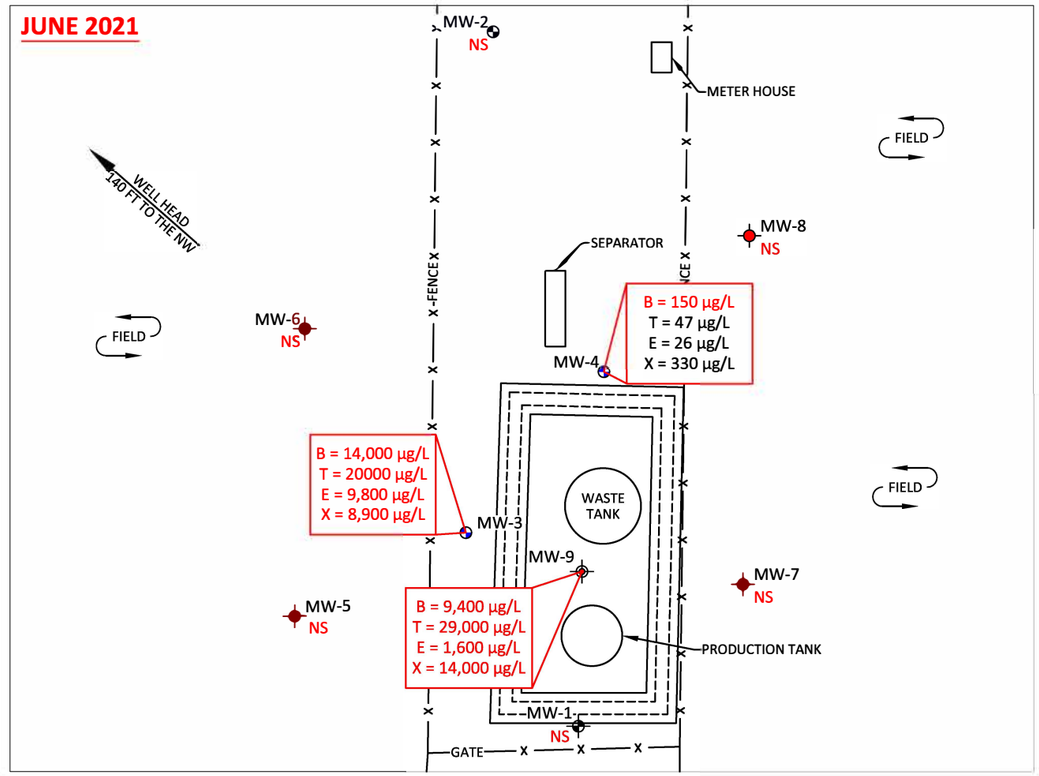
LEGEND

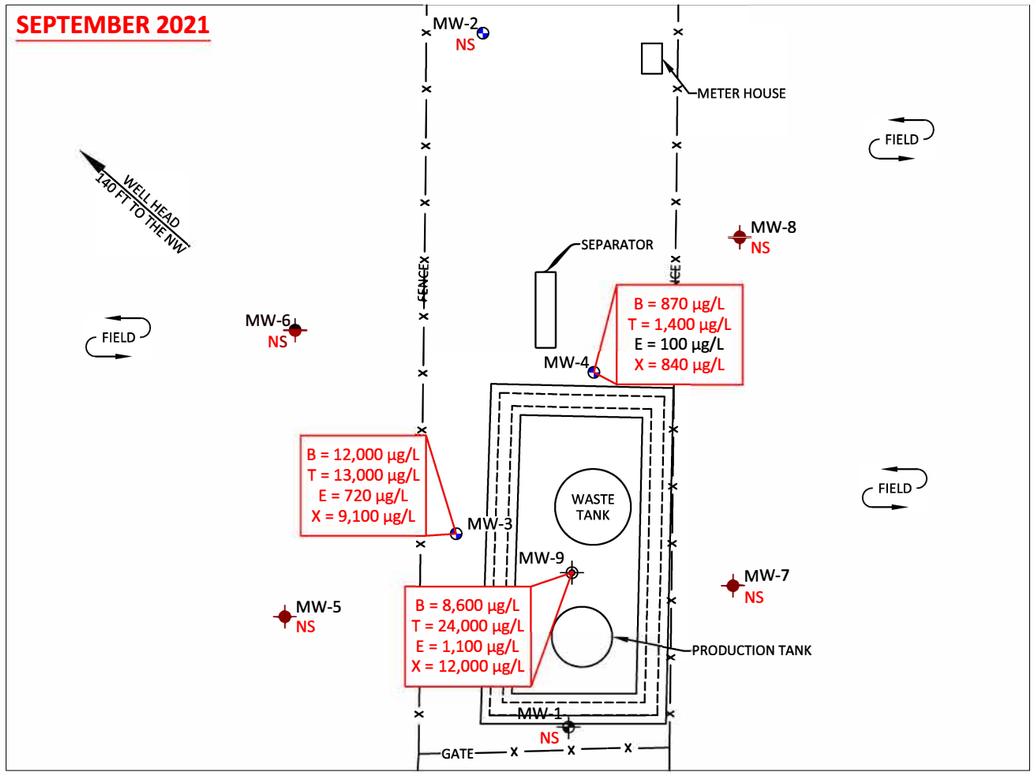
- EXISTING INVESTIGATION WELL
- MONITOR WELL INSTALLED IN APRIL AND MAY 2013
- MONITOR WELL INSTALLED IN AUGUST 2013
- MONITOR WELL INSTALLED IN JUNE 2014
- 5414.64 GROUNDWATER ELEVATIONS IN FEET (AMSL)
- –5417.00– GROUNDWATER ELEVATIONS CONTOURS IN FEET (AMSL)

N

SCALE
30 20 0 30
10
(1 INCH = 30 FEET)







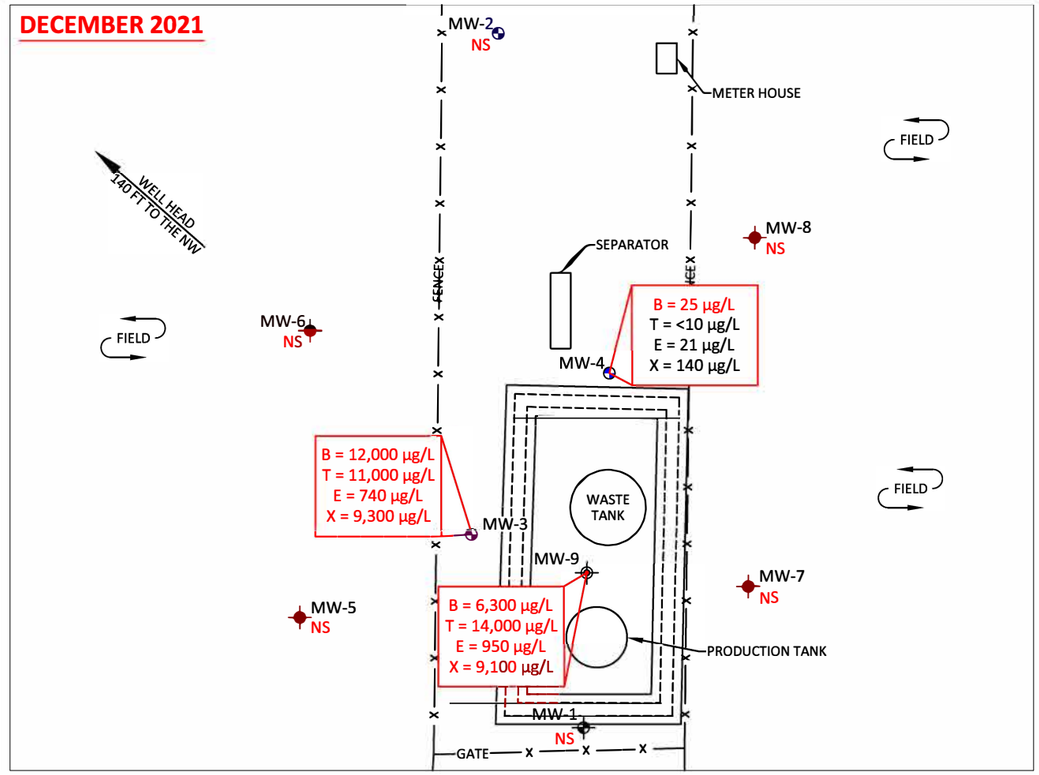


FIGURE 4

2021 GROUNDWATER CONTAMINANT CONCENTRATIONS

LOGOS RESOURCES, LLC
JULANDER FEDERAL #1E
NE¼ SW¼, SECTION 31, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.67936, W108.03514

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DRAWN BY:	DATE DRAWN:
C. Lameman	January 8, 2016
REVISIONS BY:	**DATE REVISED:**
C. Lameman	February 8, 2022
CHECKED BY:	**DATE CHECKED:**
D. Reese	February 8, 2022
APPROVED BY:	**DATE APPROVED:**
E. McNally	February 8, 2022

LEGEND

- EXISTING INVESTIGATION WELL
- MONITOR WELL INSTALLED IN APRIL AND MAY 2013
- MONITOR WELL INSTALLED IN AUGUST 2013
- MONITOR WELL INSTALLED IN JUNE 2014

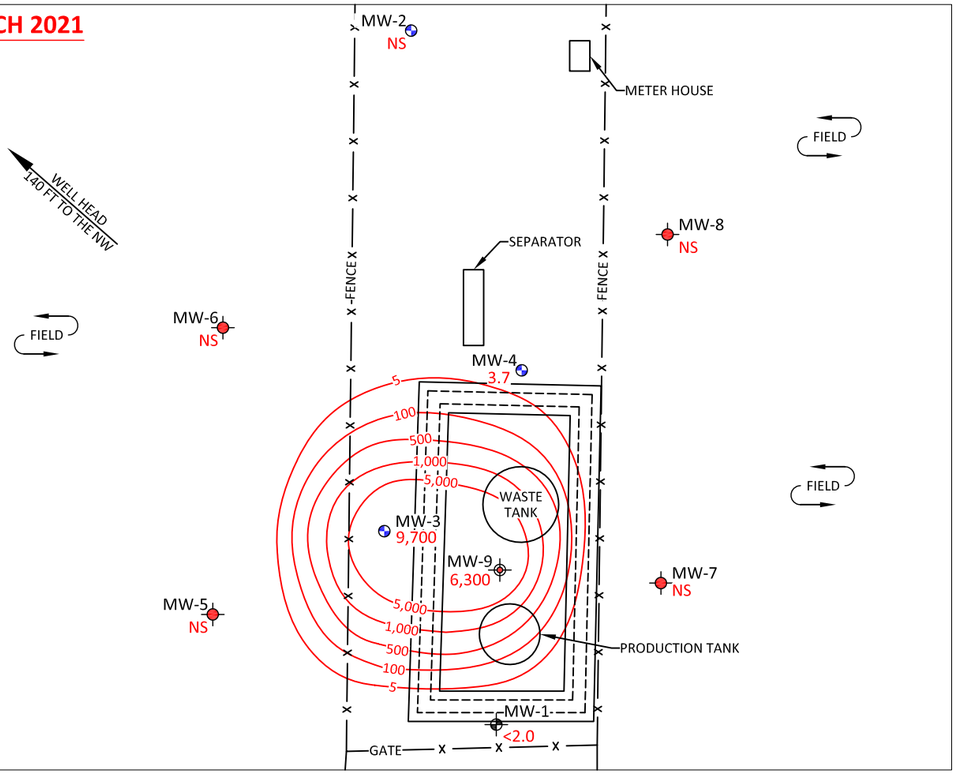
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES
µg/L	MICROGRAM PER LITER (ppb)
<	BELOW DETECTION LIMIT
NS	NOT SAMPLED

NOTE: ALL SAMPLES ANALYZED PER EPA METHOD 8021B.

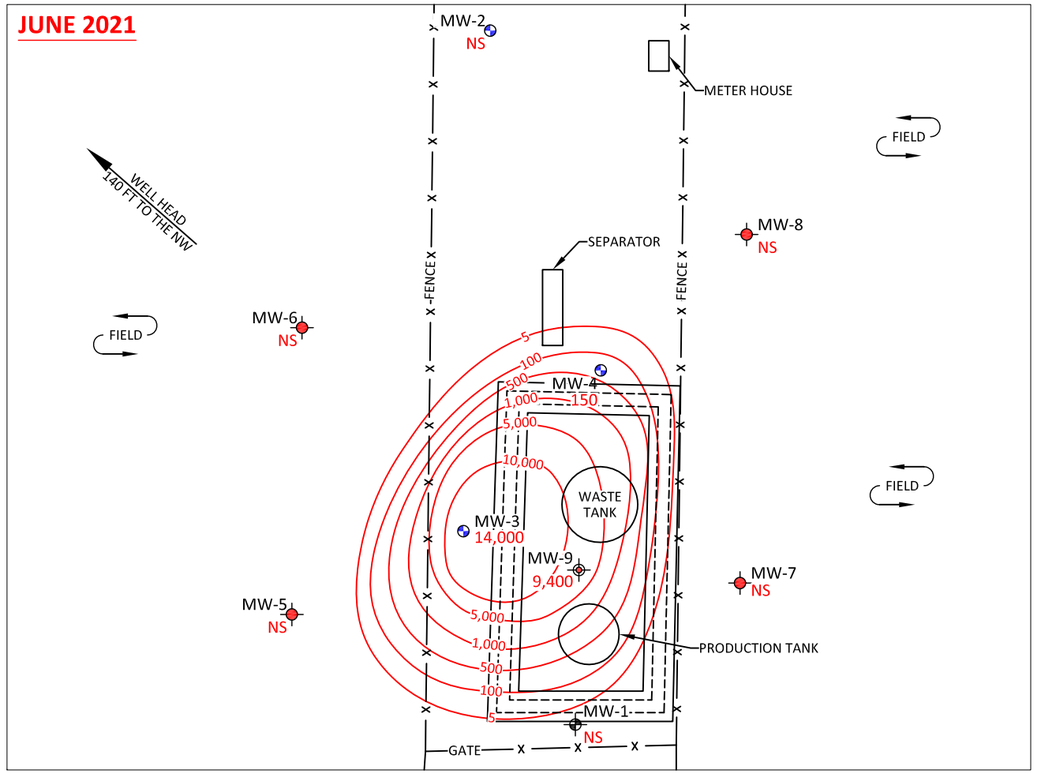
N

SCALE
30 20 0 30
10
(1 INCH = 30 FEET)

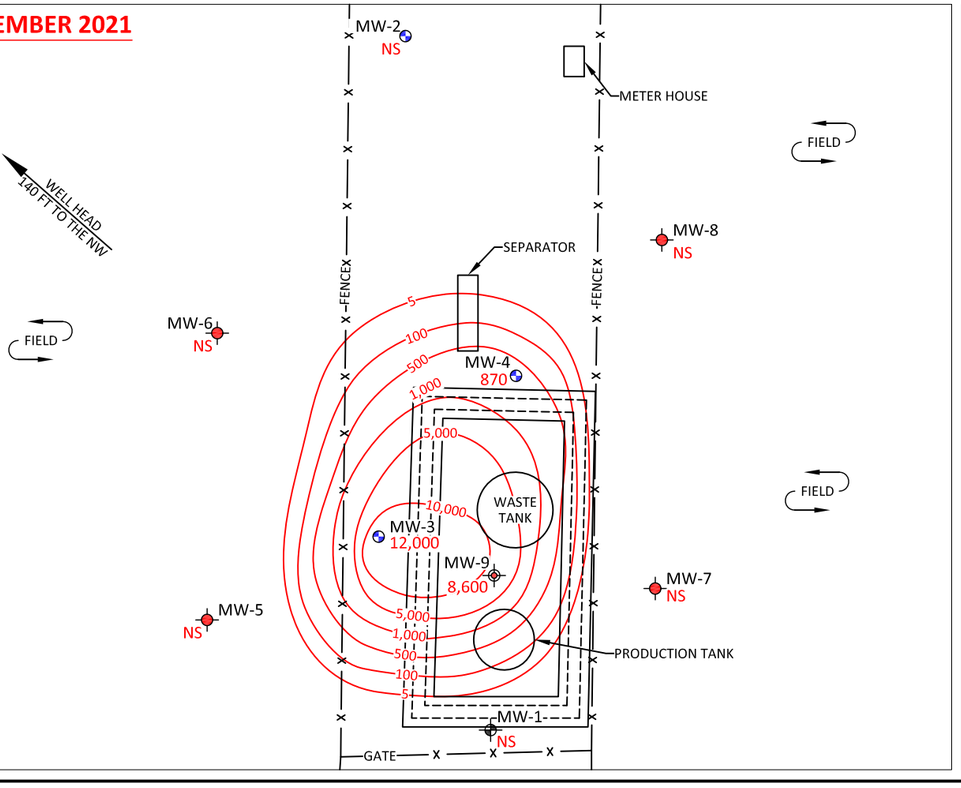
MARCH 2021



JUNE 2021



SEPTEMBER 2021



DECEMBER 2021

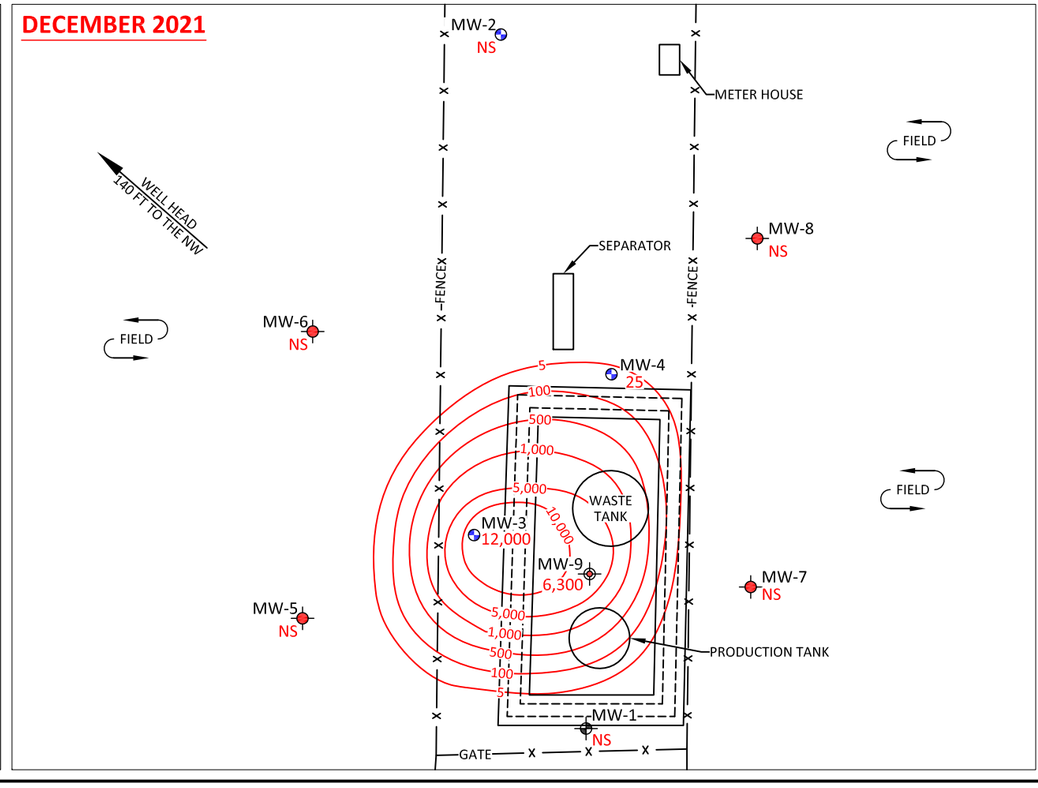


FIGURE 5

2021 DISSOLVED BENZENE CONCENTRATION CONTOURS
LOGOS RESOURCES, LLC
JULANDER FEDERAL #1E
NE¼ SW¼, SECTION 31, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.67936, W108.03514

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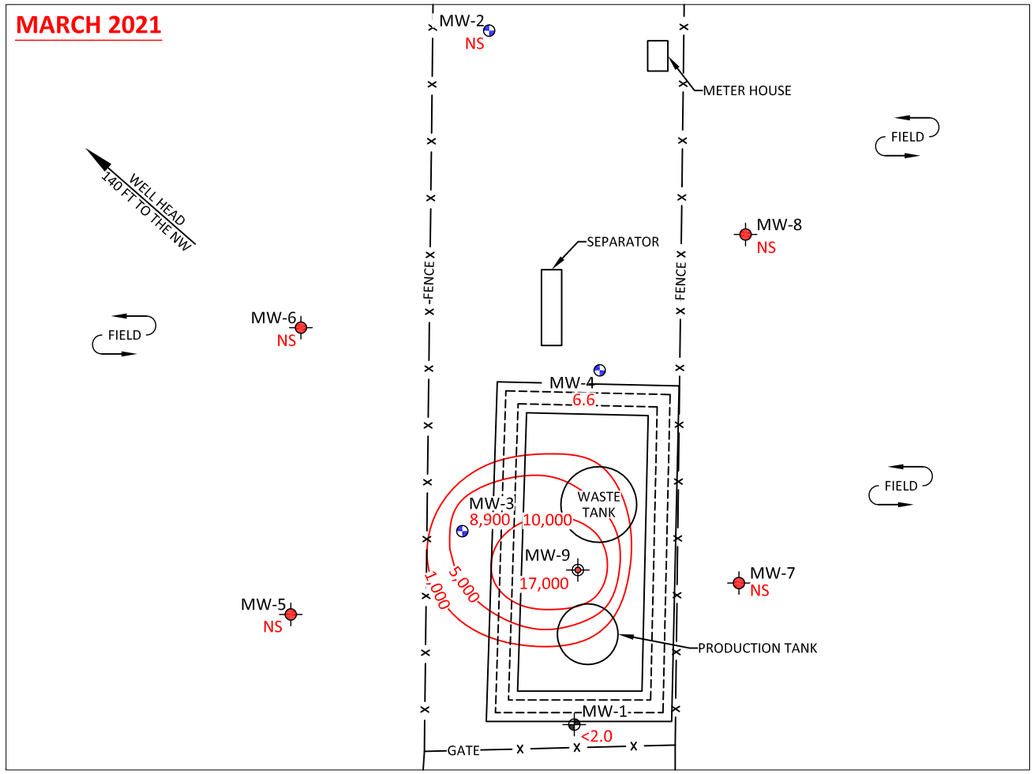
DRAWN BY:	DATE DRAWN:
C. Lameman	January 8, 2016
REVISIONS BY:	**DATE REVISED:**
C. Lameman	February 8, 2022
CHECKED BY:	**DATE CHECKED:**
D. Reese	February 8, 2022
APPROVED BY:	**DATE APPROVED:**
E. McNally	February 8, 2022

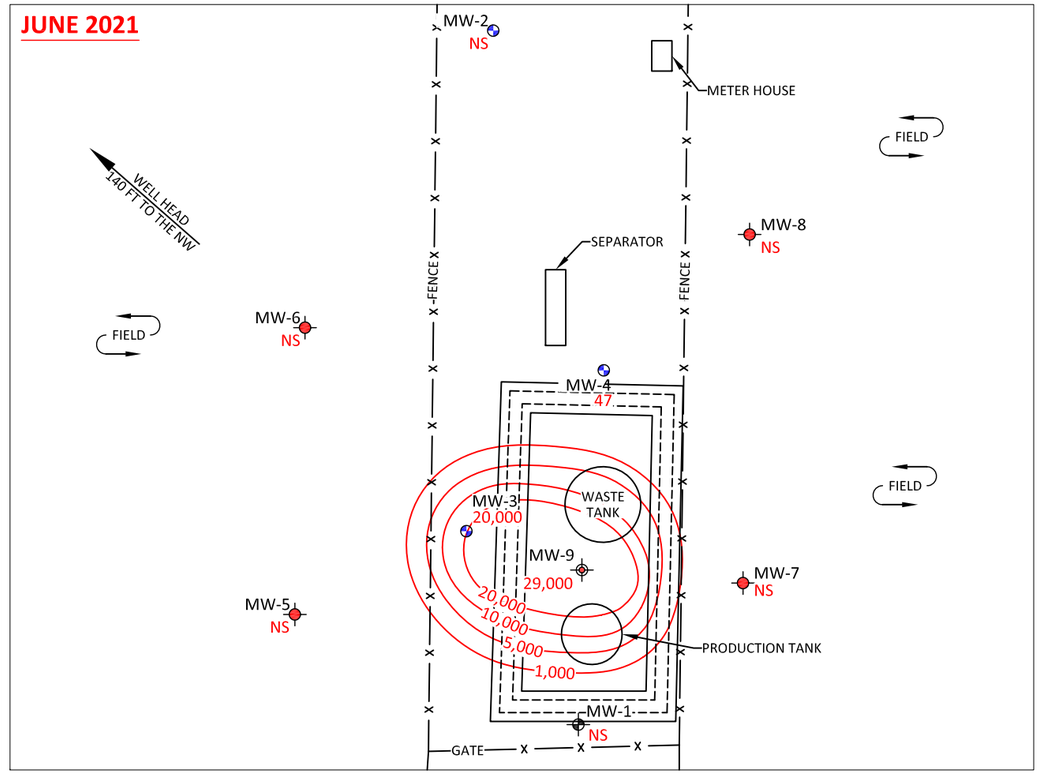
LEGEND

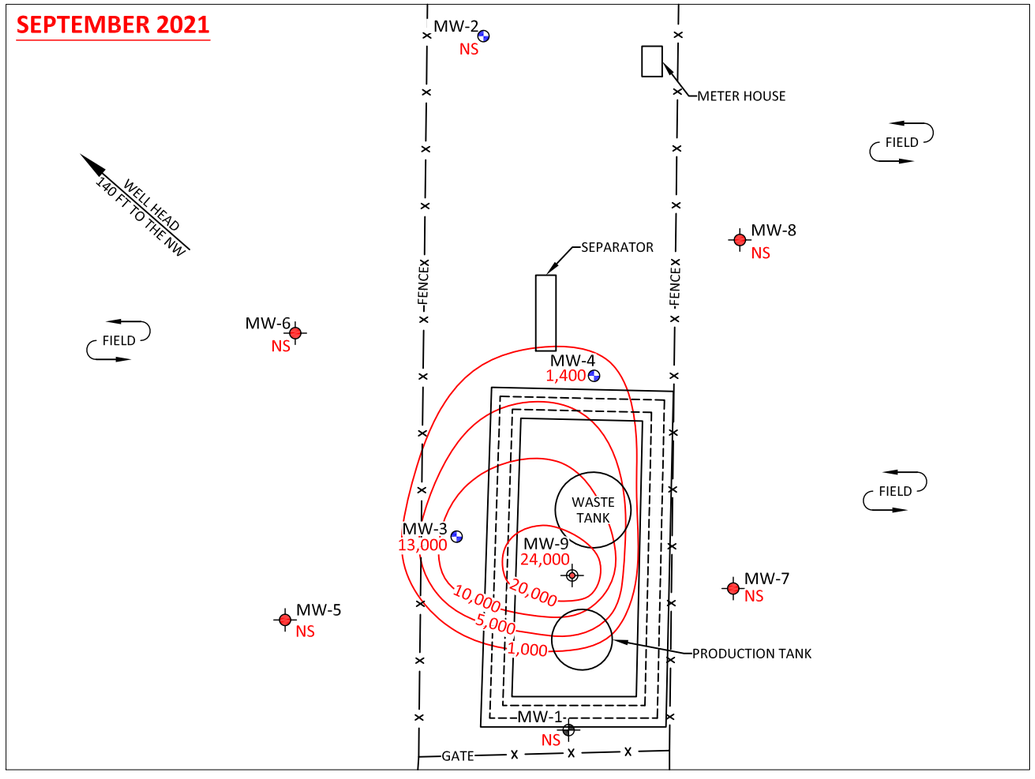
- EXISTING INVESTIGATION WELL
- MONITOR WELL INSTALLED IN APRIL AND MAY 2013
- MONITOR WELL INSTALLED IN AUGUST 2013
- MONITOR WELL INSTALLED IN JUNE 2014
- 1,100 — DISSOLVED BENZENE CONCENTRATIONS IN µg/L
- 5 — DISSOLVED BENZENE CONCENTRATIONS CONTOURS IN µg/L
- NS — NOT SAMPLED

NOTE: ALL SAMPLES ANALYZED PER USEPA METHOD 8021B.

SCALE
30 20 0 30
10
(1 INCH = 30 FEET)







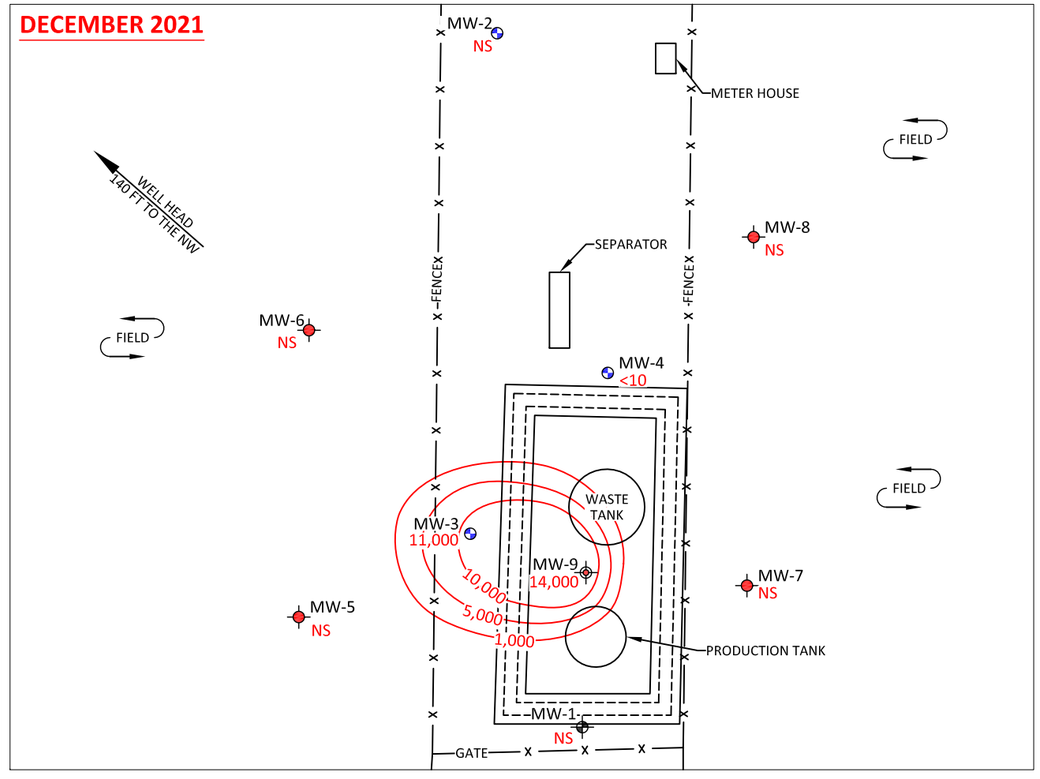


FIGURE 6

2021 DISSOLVED TOLUENE CONCENTRATION CONTOURS
LOGOS RESOURCES, LLC
JULANDER FEDERAL #1E
NE¼ SW¼, SECTION 31, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.67936, W108.03514

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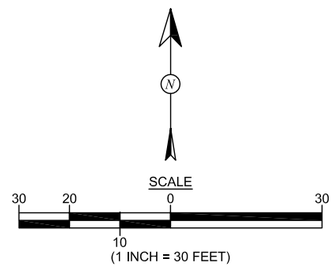
DRAWN BY:	DATE DRAWN:
C. Lameman	January 8, 2016
REVISIONS BY:	**DATE REVISED:**
C. Lameman	February 8, 2022
CHECKED BY:	**DATE CHECKED:**
D. Reese	February 8, 2022
APPROVED BY:	**DATE APPROVED:**
E. McNally	February 8, 2022

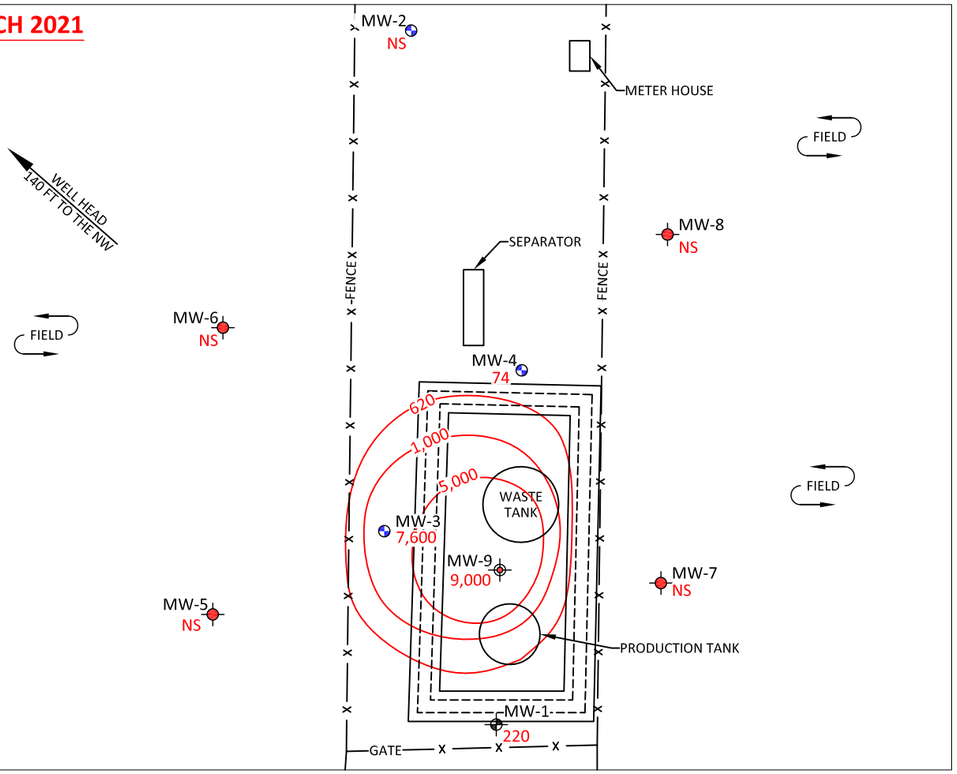
LEGEND

- EXISTING INVESTIGATION WELL
- MONITOR WELL INSTALLED IN APRIL AND MAY 2013
- MONITOR WELL INSTALLED IN AUGUST 2013
- MONITOR WELL INSTALLED IN JUNE 2014
- 21,00 — DISSOLVED TOLUENE CONCENTRATIONS IN µg/L
- —1,000— DISSOLVED TOLUENE CONCENTRATIONS CONTOURS IN µg/L
- NS — NOT SAMPLED

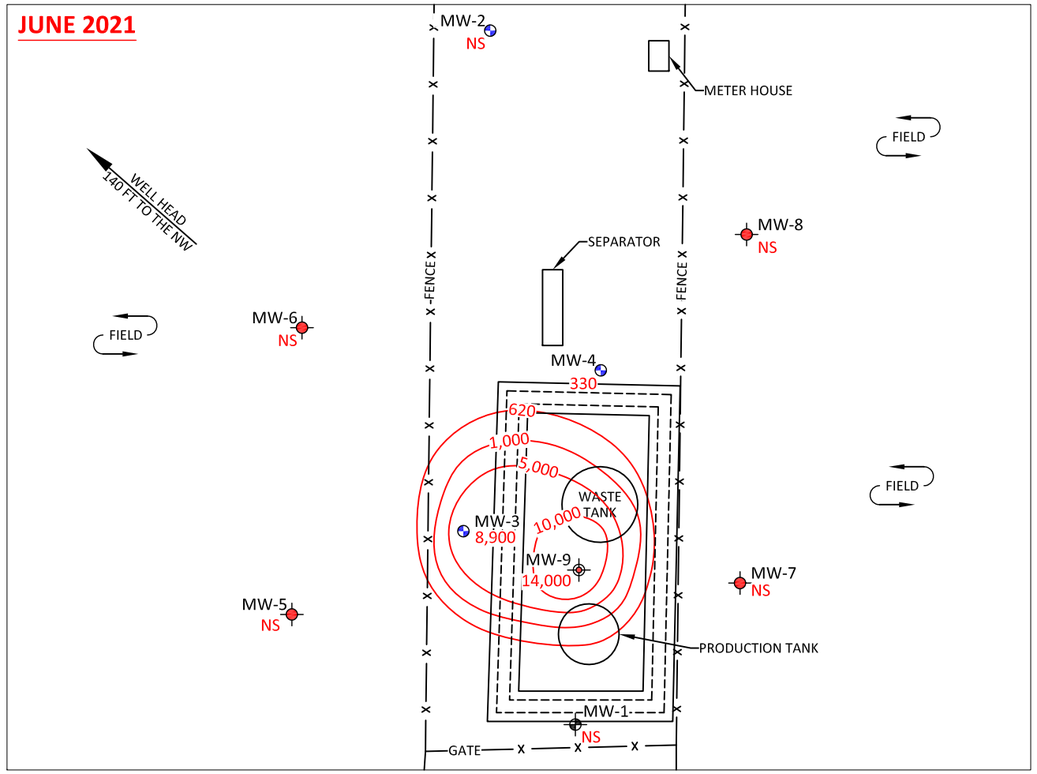
NOTE: ALL SAMPLES ANALYZED PER USEPA METHOD 8021B.



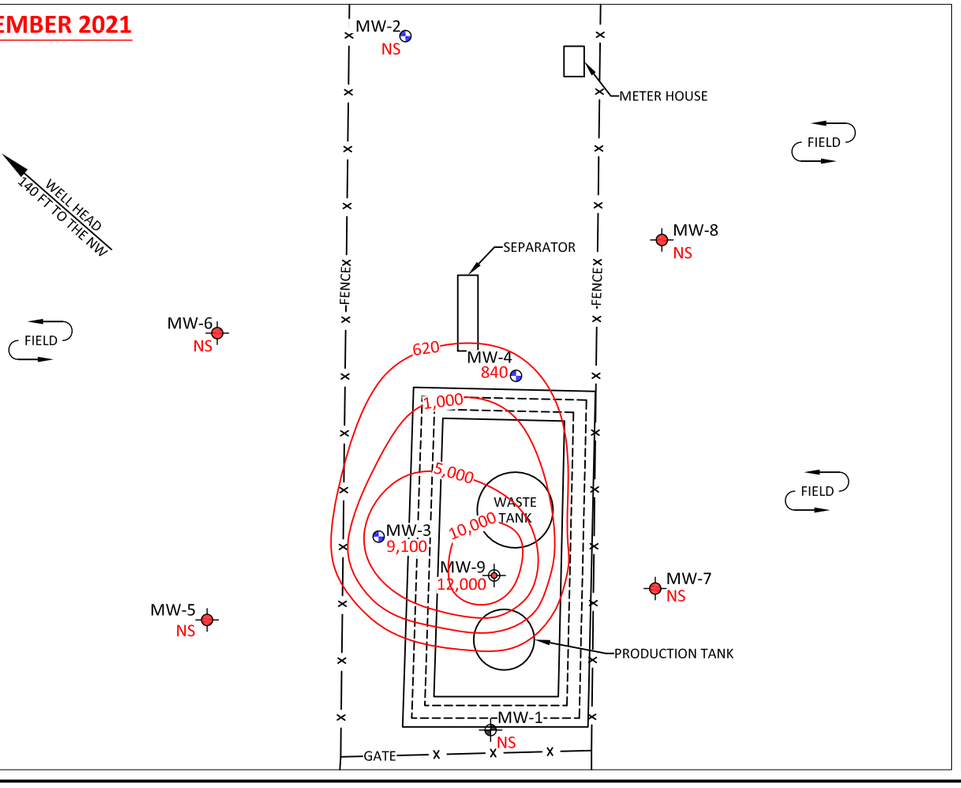
MARCH 2021



JUNE 2021



SEPTEMBER 2021



DECEMBER 2021

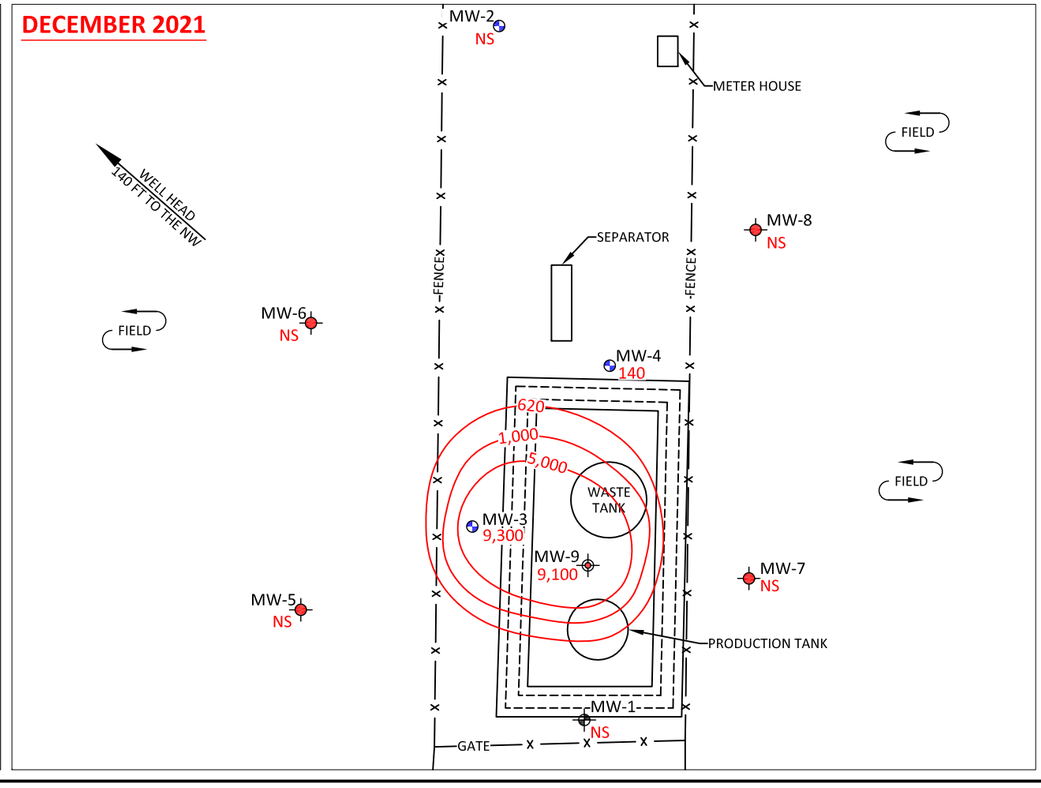


FIGURE 7

2021 DISSOLVED TOTAL XYLENES CONCENTRATION CONTOURS
LOGOS RESOURCES, LLC
JULANDER FEDERAL #1E
NE¼ SW¼, SECTION 31, T29N, R11W
SAN JUAN COUNTY, NEW MEXICO
N36.67936, W108.03514

animas environmental services
Farmington, NM • Durango, CO
animasenvironmental.com

DRAWN BY:	DATE DRAWN:
C. Lameman	January 8, 2016
REVISIONS BY:	**DATE REVISED:**
C. Lameman	February 8, 2022
CHECKED BY:	**DATE CHECKED:**
D. Reese	February 8, 2022
APPROVED BY:	**DATE APPROVED:**
E. McNally	February 8, 2022

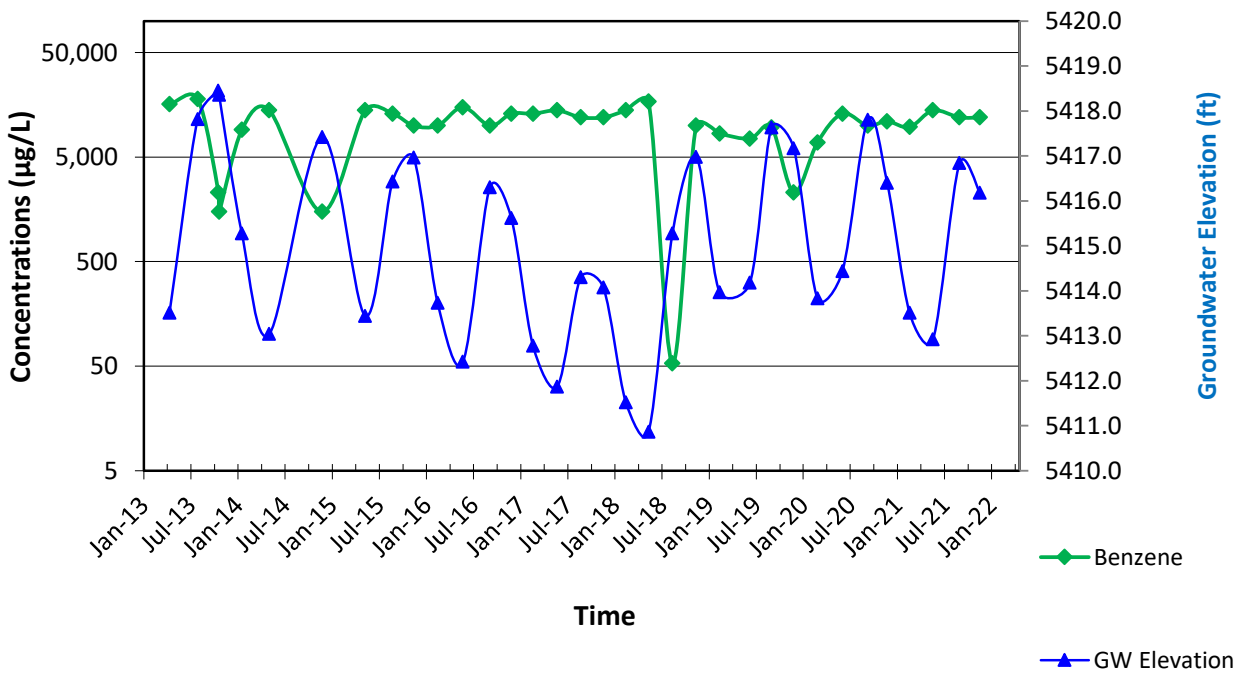
LEGEND

- EXISTING INVESTIGATION WELL
- MONITOR WELL INSTALLED IN APRIL AND MAY 2013
- MONITOR WELL INSTALLED IN AUGUST 2013
- MONITOR WELL INSTALLED IN JUNE 2014
- 3,200 — DISSOLVED TOTAL XYLENES CONCENTRATIONS IN µg/L
- —620— DISSOLVED TOTAL XYLENES CONCENTRATIONS CONTOURS IN µg/L
- NS — NOT SAMPLED

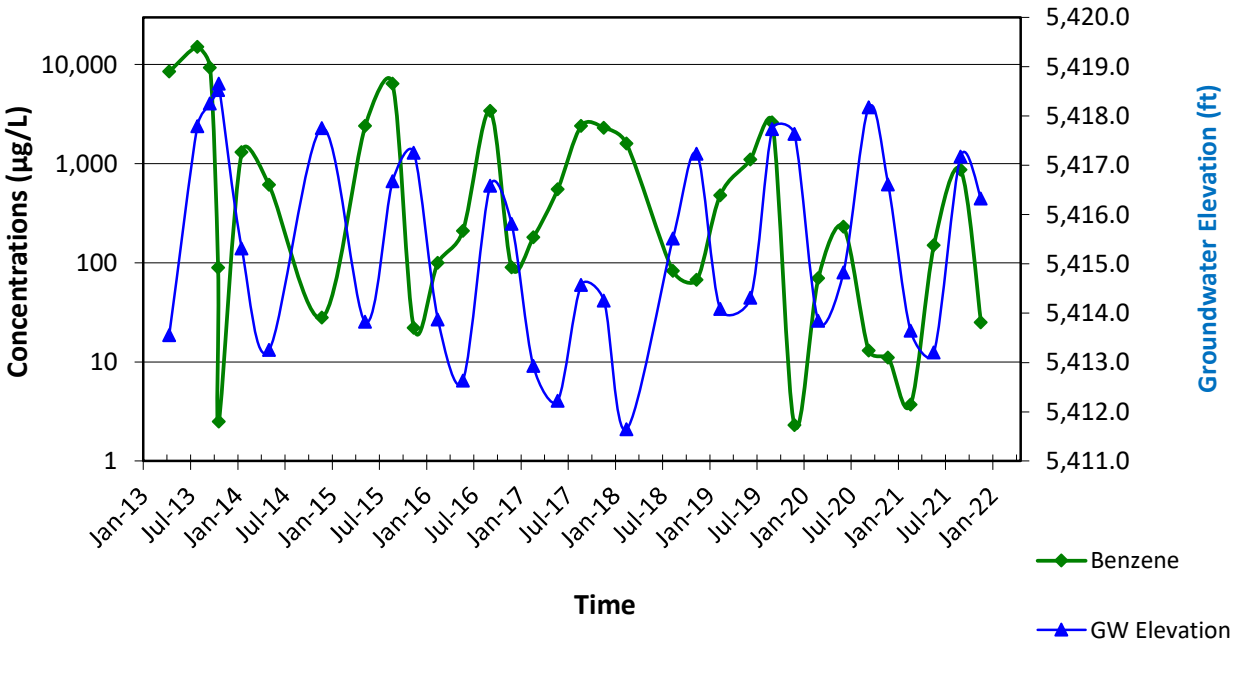
NOTE: ALL SAMPLES ANALYZED PER USEPA METHOD 8021B.

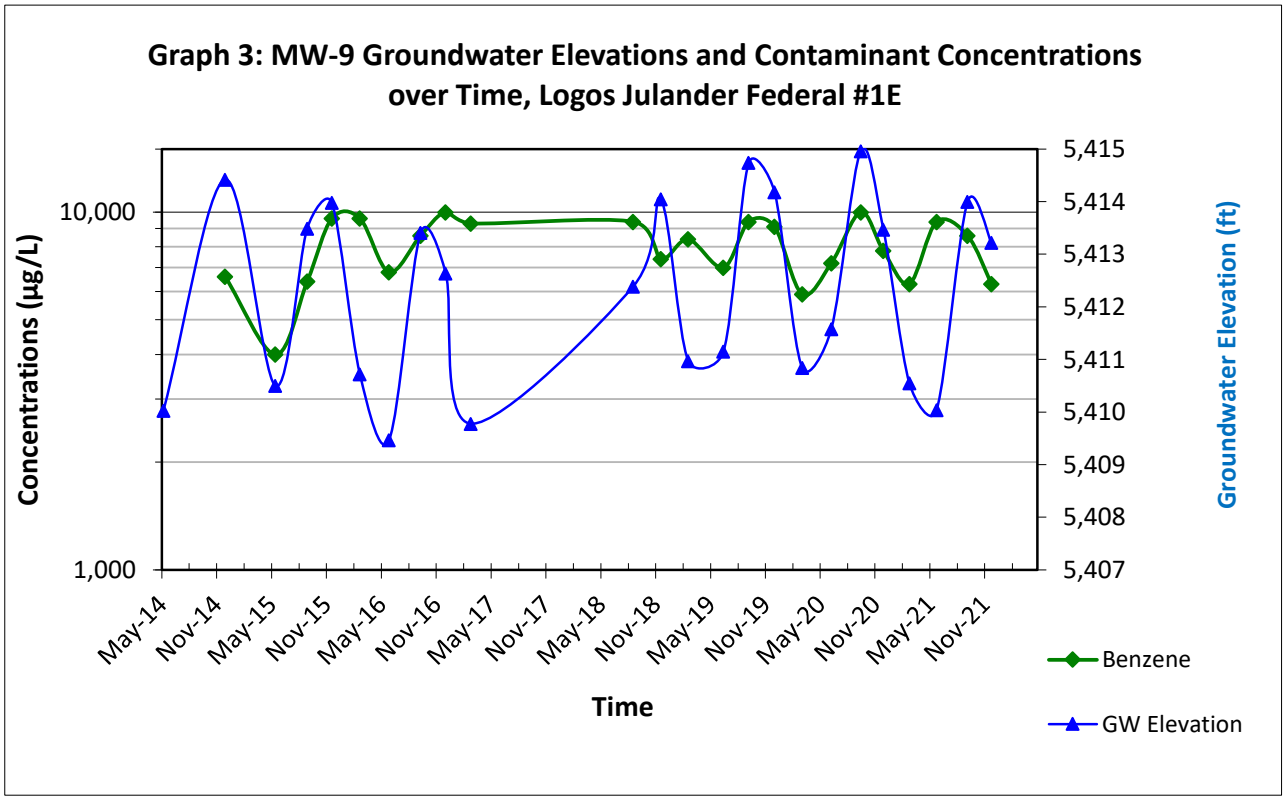
SCALE
30 20 0 30
10
(1 INCH = 30 FEET)

Graph 1: MW-3 Groundwater Elevations and Contaminant Concentrations over Time, Logos Julander Federal #1E



Graph 2: MW-4 Groundwater Elevations and Contaminant Concentrations over Time, Logos Julander Federal #1E




Graph 3: MW-9 Groundwater Elevations and Contaminant Concentrations over Time, Logos Julander Federal #1E
Concentrations (µg/L)
10,000
1,000
5,415
5,414
5,413
5,412
5,411
5,410
5,409
5,408
5,407
Groundwater Elevation (ft)
May-14
Nov-14
May-15
Nov-15
May-16
Nov-16
May-17
Nov-17
May-18
Nov-18
May-19
Nov-19
May-20
Nov-20
May-21
Nov-21
Time
Benzene
GW Elevation

From: Karen Lupton
To: Cory Smith (cory.smith@state.nm.us)
Cc: John Bruner; Tamra Sessions; Marie Florez; Elizabeth McNally (emcnally@animasenvironmental.com); Greg Broome; Corwin Lameman (clameman@animasenvironmental.com)
Subject: Logos Julander Federal 1E - Quarterly Sampling Event
Date: Tuesday, March 9, 2021 3:02:00 PM

Good Morning,

This e-mail serves as project notification that Animas Environmental Services, LLC (AES) has scheduled the quarterly groundwater monitoring and sampling event at the above referenced site. Groundwater monitoring and sampling will be conducted by AES personnel on March 12, 2021. Corwin Lameman and Greg Broome will be on-site. Their contact numbers are:

Corwin 505.486.4062
Greg 970.560.2117

If you have any questions regarding the scheduled site work, please do not hesitate to contact me at (505) 564-2281.

Karen Lupton
Director of Operations
klupton@animasenvironmental.com
Animas Environmental Services, LLC
www.animasenvironmental.com
624 E Comanche, Farmington, NM 87401
P.O. Box 8, Farmington, NM 87499-0008
(Tel) 505.564.2281

Lany Cupps

From: Karen Lupton
Sent: Thursday, June 03, 2021 10:14 AM
To: Cory Smith (cory.smith@state.nm.us)
Cc: John Bruner; Tamra Sessions; Marie Florez; Elizabeth McNally; Lany Cupps; Corwin Lameman
Subject: Logos Julander Federal 1E - Quarterly Sampling Event - API #30-045; RP# 3RP-445

Good Morning,

This e-mail serves as project notification that Animas Environmental Services, LLC (AES) has scheduled the quarterly groundwater monitoring and sampling event at the above referenced site. Groundwater monitoring and sampling will be conducted by AES personnel on June 10, 2021. Corwin Lameman will be on-site, his cell phone number is 505.486.4062.

If you have any questions regarding the scheduled site work, please do not hesitate to contact me at (505) 564-2281.

Karen Lupton
Director of Operations
klupton@animasenvironmental.com
Animas Environmental Services, LLC
www.animasenvironmental.com
624 E Comanche, Farmington, NM 87401
P.O. Box 8, Farmington, NM 87499-0008
(Tel) 505.564.2281

Lany Cupps

From: Lany Cupps
Sent: Friday, December 03, 2021 5:42 AM
To: Cory Smith
Cc: regulatory@logosresourcesllc.com; mflorez@logosresourcesllc.com; etrujillo@logosresourcesllc.com; mbrueggenjohann@logosresourcesllc.com; Jason Oyebi
Subject: Logos Julander Federal 1E - Quarterly Sampling Event Notification

Good Morning,

This e-mail serves as project notification that Animas Environmental Services, LLC (AES) has scheduled the quarterly groundwater monitoring and sampling event at the above referenced site. Groundwater monitoring and sampling will be conducted by AES personnel on Thursday, December 9, 2021. Jason Oyebi will be on-site. His contact number is 505.409.0269.

If you have any questions regarding the scheduled site work, please don't hesitate to contact me at 505.564.2281 or the number below.

Thank you,

Lany Cupps
Environmental Administrator
Animas Environmental Services, LLC
www.animasenvironmental.com
505.486.9250 mobile

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project: Groundwater Sampling
Site: Logos Resources
Location: Julander Federal #1E
Tech: C. Lameman G. Broome

Project No.: AES 160806
Date: 3-12-21
Time: 8:42 – 10:45
Form:

Well ID	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	—	41.85	—	
MW-2	—	38.69	—	(Gauge only)
MW-3	—	40.47	—	
MW-4	—	40.08	—	
MW-5	—	40.23	—	(Gauge only)
MW-6	—	38.86	—	(Gauge only)
MW-7	—	41.44	—	(Gauge only)
MW-8	—	39.67	—	(Gauge only)
MW-9	—	43.95	—	

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-1

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL/CB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 41.85 **Time:** 9:15 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 41.85 **Time:** 9:17 *(taken prior to purging well)*
Final D.T.W. (ft): 46.82 **Time:** 9:30 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES 160806
Date: 3-12-21
Arrival Time: 9:14
Air Temp: 38°F Sunny
T.O.C. Elev. (ft): 5455.49
Total Well Depth (ft): 47.72

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibration Date: 3-12-21 CB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
9:20	14.6	747	1.89	8.48	-59.9	Initial	Clear / Hydrocarbon odor
9:22	14.9	788	1.25	7.90	-126.1	1.0	Sl. Gray / Hydrocarbon odor
9:27	14.7	751	1.96	7.43	-130.8	2.0	Sl. Gray Sl. Turbid / Roots Hydr. odor
9:28	—	—	—	—	—	—	Samples Collected
							Low Yield and
							Recharge

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: On site Waste Tank
Collected Samples Stored on Ice in Cooler:
Chain of Custody Record Complete:
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume = 3 Gallons

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 40.47 **Time:** 9:55 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.47 **Time:** 9:57 *(taken prior to purging well)*
Final D.T.W. (ft): 43.59 **Time:** 10:11 *(taken after sample collection)*
If NAPL Present: D.T.P.: – D.T.W.: – Thickness: – Time: –

Project No.: AES 160806
Date: 3-12-21
Arrival Time: 9:54
Air Temp: 40°F Sunny
T.O.C. Elev. (ft): 5453.98
Total Well Depth (ft): 46.52

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibration Date: 3-12-21 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
9:59	14.6	1085	3.99	7.18	-93.3	Initial	Clear / Hydrocarbon Odor
10:01	15.1	1096	1.37	7.07	-99.0	1.0	Sl. Tan Sl. Turbid / White Bags Hydro. Odor
10:05	15.2	1098	1.22	6.88	-96.0	2.0	Tan Sed Turbid / V. Strong Hydro. Odor
10:07	15.2	1066	1.46	6.77	-94.9	3.0	Tan Sed Turbid / V. Strong Hydro. Odor
10:09	—	—	—	—	—	—	Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: On Site Waste Tank
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 3 Gallons

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CA/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 40.08 **Time:** 9:35 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.08 **Time:** 9:37 *(taken prior to purging well)*
Final D.T.W. (ft): 46.89 **Time:** 9:50 *(taken after sample collection)*
If NAPL Present: D.T.P.: – D.T.W.: – Thickness: – Time: –

Project No.: AES 160806
Date: 3-12-21
Arrival Time: 9:32
Air Temp: 39°F Sunny
T.O.C. Elev. (ft): 5453.72
Total Well Depth (ft): 47.45

Water Quality Parameters - Recorded During Well Purging

YSI #1 Calibration Date: 3-12-21 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
						~~Initial~~	
	NO WATER QUALITY READINGS DUE TO SHEEN						
		SEE NOTES BELOW					
9:49							Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: On Site Waste Tank
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 3.5 Gallons
Attempt to Bail off Sheen.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-9

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 43.95 **Time:** 10:15 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 43.95 **Time:** 10:17 *(taken prior to purging well)*
Final D.T.W. (ft): 50.86 **Time:** 10:36 *(taken after sample collection)*
If NAPL Present: D.T.P.: – D.T.W.: – Thickness: – Time: –

Project No.: AES 160806
Date: 3-12-21
Arrival Time: 10:13
Air Temp: 41°F Sunny
T.O.C. Elev. (ft): TBS
Total Well Depth (ft): 52.63

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibration Date: 3-12-21 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
–	NO WATER QUALITY READINGS DUE TO SHEEN						–
–	SEE NOTES BELOW						
10:35							Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: On Site Waste Tank
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume ≈ 4.25 Gallons
Attempt to Bail off Sheen and Sample Below Sheen Surface

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project: Groundwater Sampling
Site: Logos Resources
Location: Julander Federal #1E
Tech: Corwin Lameman + Lany Cupps

Project No.: AES 160806
Date: 6-10-21
Time: 0826 - 10:20
Form:

Well ID	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	—	42.38	—	(Gauge only)
MW-2	—	38.89	—	(Gauge only)
MW-3	—	41.06	—	
MW-4	HW	40.52	—	
MW-5	—	40.95	—	(Gauge only)
MW-6	—	39.41	—	(Gauge only)
MW-7	—	41.82	—	(Gauge only)
MW-8	—	39.92	—	(Gauge only)
MW-9	44.42	44.46	0.04	

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL + LC
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 160806
Date: 6-10-21
Arrival Time: 8:53
Air Temp: 63°F
T.O.C. Elev. (ft): 5453.98
Total Well Depth (ft): 46.52

Initial D.T.W. (ft): 41.06 **Time:** 8:55 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 41.06 **Time:** 8:57 *(taken prior to purging well)*
Final D.T.W. (ft): 42.50 **Time:** 9:13 *(taken after sample collection)*
If NAPL Present: **D.T.P.:** — **D.T.W.:** — **Thickness:** — **Time:** —

Water Quality Parameters - Recorded During Well Purging

YSI # 2 **Calibration Date:** 6-8-21 CL

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
9:02	19.42	1.103	1.57	6.79	-93.3	Initial .025	Well infested
9:05	16.56	1.111	1.97	6.73	-89.7	1 gal	w/ ants
9:08	15.80	1.085	1.78	6.89	-83.9	2 gal	Hydrocarbon odor
9:10	—	—	—	—	—	—	Sample collected

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: on ground - no drainage to SW drains
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments:

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL + LC
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 160806
Date: 6-10-21
Arrival Time: 9:17
Air Temp: 72°F
T.O.C. Elev. (ft): 5453.72
Total Well Depth (ft): 47.45

Initial D.T.W. (ft): 40.52 **Time:** 9:17 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.52 **Time:** 9:31 *(taken prior to purging well)*
Final D.T.W. (ft): 43.79 **Time:** 9:41 *(taken after sample collection)*
If NAPL Present: **D.T.P.:** — **D.T.W.:** — **Thickness:** — **Time:** —

Water Quality Parameters - Recorded During Well Purging

YSI # 2 Calibration Date: 6-8-21 CL

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
9:34	18.47	0.980	1.04	6.71	-99.0	Initial 0.25gal	
9:38							Sheen no water quality readings taken see notes below
9:41						Samples Collected	

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: on ground - No drainage to SW drains
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Sheen developed, no water quality collected, attempted to bail off sheen, samples collected below Sheen Surface

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-9

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL+LC
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): — **Time:** —
Confirm D.T.W. (ft): — **Time:** —
Final D.T.W. (ft): 46.90 **Time:** 10:07
If NAPL Present: D.T.P.: 44.42 D.T.W.: 44.46 Thickness: 0.04 Time: 9:50

Project No.: AES 160806
Date: 6-10-21
Arrival Time: 9:49
Air Temp: 76°F
T.O.C. Elev. (ft): TBS
Total Well Depth (ft): 52.63
(taken at initial gauging of all wells)
(taken prior to purging well)
(taken after sample collection)

Water Quality Parameters - Recorded During Well Purging

YSI # 2 Calibration Date: 6-8-21

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
9:56	NAPL 0.04 ft - no water quality measurements taken.						
10:07							Sample collected

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: Into Onsite Tank
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Attempt to remove NAPL with Bailer. Sample collected below NAPL/Sheen Layer.

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project: Groundwater Sampling
Site: Logos Resources
Location: Julander Federal #1E
Tech: CL-JO

Project No.: AES 160806
Date: 9-21-21
Time: 8:26 - 10:30
Form:

Well ID	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	—	38.36	—	(Gauge only)
MW-2	—	35.01	—	(Gauge only)
MW-3	—	37.14	—	
MW-4	36.55	36.55	<0.01	
MW-5	—	37.04	—	(Gauge only)
MW-6	—	35.56	—	(Gauge only)
MW-7	—	37.79	—	(Gauge only)
MW-8	—	35.84	—	(Gauge only)
MW-9	40.49	40.50	0.01	

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL/JO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 37.14 **Time:** 9:47 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 37.14 **Time:** 9:48 *(taken prior to purging well)*
Final D.T.W. (ft): 37.85 **Time:** 10:13 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.: AES 160806
Date: 9-21-21
Arrival Time: 9:45
Air Temp: 53° F - Sunny
T.O.C. Elev. (ft): 5453.98
Total Well Depth (ft): 46.52

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibration Date: 9-20-21 - JO

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
7:57	17.3	930	.48	6.80	-83.7	initial / .25 gal	odor, clear, bugs organics
9:59	16.5	940	.57	6.76	-81.7	1 gal	s. sed. bugs, organic odor - Tan
10:03	15.7	958	.55	6.76	-78.9	2 gal	S.A.A.
10:06	15.7	1005	.52	6.76	-76.6	3 gal	S.A.A
10:09	15.8	1020	.50	6.76	-75.4	4 gal	S.A.A
~~10:11~~	—	—	—	—	—	—	samples collected

Same as above

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: On Ground - No Drainage to Stormwater Drains
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Vol. — 4.59 gallons
Slight odor, organics

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL-JO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 36.55 **Time:** 10:18 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 36.55 **Time:** 10:14 *(taken prior to purging well)*
Final D.T.W. (ft): 37.11 **Time:** 10:43 *(taken after sample collection)*
If NAPL Present: D.T.P.: 36.55 D.T.W.: 36.55 Thickness: less than .01 Time: 10:18

Project No.: AES 160806
Date: 9-21-21
Arrival Time: 10:16
Air Temp: 59° - Sunny
T.O.C. Elev. (ft): 5453.72
Total Well Depth (ft): 47.45

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibration Date: 9-20-21 - JO

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
10:24	NO	WATER	QUALITY	READINGS			sheen, odor
10:41	—	—	—	—	—	5.25 GAL	Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: Onsite storage tank
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge Volume - 5.25 gal

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-9

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: CL - JO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 40.50 Time: 10:56 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): Time: (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: 40.49 D.T.W.: 40.50 Thickness: .01 Time: 10:56

Project No.: AES 160806
Date: 9-21-21
Arrival Time: 10:56
Air Temp: 60° - Sunny
T.O.C. Elev. (ft): TBS
Total Well Depth (ft): 52.63

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibration Date: 9-20-21 - JO

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
10:56	NO WATER QUALITY READINGS						Strong odor Sheen Clear
11:16						2 GAL	SAMPLES Collected

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: On-site storage tank
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Calculated Purge volume D.T.P - 44.15
D.T.W - 44.16 Thickness - .01 Time 11:17 am

DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project: Groundwater Sampling
Site: Logos Resources
Location: Julander Federal #1E
Tech: JO

Project No.: AES 160806
Date: 12/09/21
Time: 9:50
Form:

Well ID	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1		39.22		(Gauge/water quality parameters only) 11:20
MW-2		35.85		(Gauge/water quality parameters only) 12:58
MW-3	37.80	37.80	<0.01	sheen, strong odor 14:37
MW-4	37.40	37.40	<0.01	sheen, strong odor 12:18
MW-5	—	37.65	—	(Gauge/water quality parameters only) 10:11
MW-6		36.16		(Gauge/water quality parameters only) 15:26
MW-7		38.68		(Gauge/water quality parameters only) 15:31
MW-8		36.84		(Gauge/water quality parameters only) 15:36
MW-9	41.27	41.28	0.01	white in color, strong odor 13:33
				MW-6, MW-7, MW-8 NO WATER QUALITY READINGS DUE TO CROSS CONTAMINATION OF YSI. — JO

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

GROUNDWATER SAMPLE COLLECTION FORM

Monitor Well No: MW-1

Animas Environmental Services
624 E Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Salvador Federal #1E
Project: Logos Resources, LLC
Sampling Technician: JO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 39.22 Time: 11:20 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 39.22 Time: 11:21 (taken prior to purging well)
Final D.T.W. (ft): 43.80 Time: 12:06 (taken after sample collection)
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.:
Date: 12-09-2021
Arrival Time: 11:29
Air Temp: Cloudy ≈ 40°
T.O.C. Elev. (ft):
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibration Date: JO By: 12-09-2021

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
11:35	14.1	783	0.7	6.4	-124.6	Initial	Bio-odor clear
11:41	14.3	818	0.84	6.3	-111.2	1 gallon	Bio-odor gray
11:48	14.5	803	1.14	6.6	-100.0	2 gallon	S.A.A
11:55	14.5	780	1.24	6.5	-75.4	3 gallon	S.A.A
12:02	14.5	769	1.7	6.5	-38.2	4 gallons	S.A.A

Analytical Parameters (include analysis method and number and type of sample containers)

Disposal of Purged Water: Ungraveled - No drainage to SW drains
Collected Samples Stored on Ice in Cooler: N/A
Chain of Custody Record Complete: N/A
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Check Water Level or Check Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Purge ≈ 4 gallons - JO

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: JO
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 160806
Date: 12/09/21
Arrival Time: 14:28
Air Temp: ≈40° cloudy
T.O.C. Elev. (ft): 5453.98
Total Well Depth (ft): 46.52

Initial D.T.W. (ft): 37.80 **Time:** 14:37 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 37.80 **Time:** 14:38 *(taken prior to purging well)*
Final D.T.W. (ft): 38.95 **Time:** 15:13 *(taken after sample collection)*
If NAPL Present: D.T.P.: — **D.T.W.:** — **Thickness:** — **Time:** —

Water Quality Parameters - Recorded During Well Purging

YSI # 1 **Calibration Date:** 12-09-21 JO

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	No Readings due to strong Hydrocarbon odor						
and what appeared to be a slight sheen.							-14:57
						Samples collected @	15:14

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL ($HgCl_2$) VOA

Disposal of Purged Water: Onsite tank collection
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: 4.26 gallons Purged - JO - Sheen and strong odor
calculated
water is "milky" in color

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-4

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: JO
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.: AES 160806
Date: 12/09/21
Arrival Time: 12:18
Air Temp: 40°
T.O.C. Elev. (ft): 5453.72
Total Well Depth (ft): 47.45

Initial D.T.W. (ft): 37.40 **Time:** 12:18 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 37.40 **Time:** 12:20 *(taken prior to purging well)*
Final D.T.W. (ft): 38.42 **Time:** 12:46 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Water Quality Parameters - Recorded During Well Purging

YSI # — Calibration Date: —

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
—	NO	READING	DUE	TO	NAPL	SHEEN	—
C	12:24 - 50						
	12:48	—	—	—	—	—	Samples Collected

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: Onsite containment tank - 50
Collected Samples Stored on Ice in Cooler: Yes
Chain of Custody Record Complete: Yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Purge 4.9 gallons, Sheen and strong odor of hydrocarbons

GROUNDWATER SAMPLE COLLECTION FORM

Monitor Well No: MW-5

Animas Environmental Services
624 E Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Jolander Federal #1E
Project: Logo Resources, LLC
Sampling Technician: JO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 37.65 Time: 10:11 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 37.65 Time: 10:12 (taken prior to purging well)
Final D.T.W. (ft): Time: (taken after sample collection)
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.:
Date: 12-09-21
Arrival Time: 10:11
Air Temp: Cloudy ± 40°
T.O.C. Elev. (ft):
Total Well Depth (ft):

Water Quality Parameters - Recorded During Well Purging

YSI # — Calibration Date: 12-9-21 By: JO

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
10:50	13.8	1151	2.6	6.2	211.5	Init.	Clear no odor
10:55	14.1	1165	2.7	6.28	228.0	1 gallon	Clear no odor
11:00	14.2	1168	1.60	6.27	101.0	2 gallon	SAA
11:08	14.3	1160	1.62	6.29	54.4	3 gallon	SAA

Analytical Parameters (include analysis method and number and type of sample containers)

Disposal of Purged Water: On ground via drainage to SW drains
Collected Samples Stored on Ice in Cooler: N/A
Chain of Custody Record Complete: N/A
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Check Water Level or Check Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Purge Approx ~ 3 gallons - did not get FDTW reading - JO

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-9

Animas Environmental Services
624 E. Comanche St., Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Site: Groundwater Sampling
Location: Julander Federal #1E
Project: Logos Resources, LLC
Sampling Technician: JO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 41.28 **Time:** 13:33 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 41.28 **Time:** 13:34 *(taken prior to purging well)*
Final D.T.W. (ft): 48.05 **Time:** 14:20 *(taken after sample collection)*
If NAPL Present: D.T.P.:— D.T.W.:— Thickness:— Time:—

Project No.: AES 160806
Date: 12/09/21
Arrival Time: 13:31
Air Temp: ~40° Cloudy
T.O.C. Elev. (ft): TBS
Total Well Depth (ft): 52.63

Water Quality Parameters - Recorded During Well Purging

YSI #___ Calibration Date:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
13:41	—	NO WATER QUALITY READINGS DUE TO SHEEN					
						Purge 5.5 gallon	
						Samples Collected 14:18	

Analytical Parameters (include analysis method and number and type of sample containers)

USEPA Method 8260 (Full List VOCs) - Three 40 mL (HgCl2) VOA

Disposal of Purged Water: Onsite containment tank
Collected Samples Stored on Ice in Cooler: yes
Chain of Custody Record Complete: yes
Analytical Laboratory: Hall Environmental Analysis Laboratory, Albuquerque, NM
Equipment Used During Sampling: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Strong odor with sheen - 13:35 - D
1st 2 bailers were clear, all others after were "milky" white with strong Hydrocarbon odor.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

March 25, 2021

David Reese
Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL:
FAX:

RE: Logos Julander Federal 1E OrderNo.: 2103693

Dear David Reese:

Hall Environmental Analysis Laboratory received 5 sample(s) on 3/13/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: Logos Julander Federal 1E
Collection Date: 3/12/2021 9:28:00 AM
Lab ID: 2103693-001 **Matrix:** AQUEOUS **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Toluene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Ethylbenzene	47	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2,4-Trimethylbenzene	40	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,3,5-Trimethylbenzene	26	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Naphthalene	20	4.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1-Methylnaphthalene	ND	8.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
2-Methylnaphthalene	ND	8.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Acetone	ND	20		µg/L	2	3/25/2021 3:42:51 AM	A76195
Bromobenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Bromodichloromethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Bromoform	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Bromomethane	ND	6.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
2-Butanone	ND	20		µg/L	2	3/25/2021 3:42:51 AM	A76195
Carbon disulfide	ND	20		µg/L	2	3/25/2021 3:42:51 AM	A76195
Carbon Tetrachloride	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Chlorobenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Chloroethane	ND	4.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Chloroform	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Chloromethane	ND	6.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
2-Chlorotoluene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
4-Chlorotoluene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
cis-1,2-DCE	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Dibromochloromethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Dibromomethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,3-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,4-Dichlorobenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Dichlorodifluoromethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,1-Dichloroethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,1-Dichloroethene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2-Dichloropropane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,3-Dichloropropane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
2,2-Dichloropropane	ND	4.0		µg/L	2	3/25/2021 3:42:51 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: Logos Julander Federal 1E
Collection Date: 3/12/2021 9:28:00 AM
Lab ID: 2103693-001 **Matrix:** AQUEOUS **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
1,1-Dichloropropene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Hexachlorobutadiene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
2-Hexanone	ND	20		µg/L	2	3/25/2021 3:42:51 AM	A76195
Isopropylbenzene	3.9	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
4-Isopropyltoluene	2.3	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
4-Methyl-2-pentanone	ND	20		µg/L	2	3/25/2021 3:42:51 AM	A76195
Methylene Chloride	ND	6.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
n-Butylbenzene	ND	6.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
n-Propylbenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
sec-Butylbenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Styrene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
tert-Butylbenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
trans-1,2-DCE	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,1,1-Trichloroethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,1,2-Trichloroethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Trichloroethene (TCE)	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Trichlorofluoromethane	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
1,2,3-Trichloropropane	ND	4.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Vinyl chloride	ND	2.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Xylenes, Total	220	3.0		µg/L	2	3/25/2021 3:42:51 AM	A76195
Surr: 1,2-Dichloroethane-d4	87.6	70-130		%Rec	2	3/25/2021 3:42:51 AM	A76195
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	2	3/25/2021 3:42:51 AM	A76195
Surr: Dibromofluoromethane	95.1	70-130		%Rec	2	3/25/2021 3:42:51 AM	A76195
Surr: Toluene-d8	104	70-130		%Rec	2	3/25/2021 3:42:51 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Logos Julander Federal 1E
Collection Date: 3/12/2021 10:09:00 AM
Lab ID: 2103693-002 **Matrix:** AQUEOUS **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	9700	500		µg/L	500	3/25/2021 4:09:44 AM	A76195
Toluene	8900	500		µg/L	500	3/25/2021 4:09:44 AM	A76195
Ethylbenzene	690	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2,4-Trimethylbenzene	400	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,3,5-Trimethylbenzene	170	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Naphthalene	ND	100		µg/L	50	3/25/2021 4:36:42 AM	A76195
1-Methylnaphthalene	ND	200		µg/L	50	3/25/2021 4:36:42 AM	A76195
2-Methylnaphthalene	ND	200		µg/L	50	3/25/2021 4:36:42 AM	A76195
Acetone	ND	500		µg/L	50	3/25/2021 4:36:42 AM	A76195
Bromobenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Bromodichloromethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Bromoform	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Bromomethane	ND	150		µg/L	50	3/25/2021 4:36:42 AM	A76195
2-Butanone	ND	500		µg/L	50	3/25/2021 4:36:42 AM	A76195
Carbon disulfide	ND	500		µg/L	50	3/25/2021 4:36:42 AM	A76195
Carbon Tetrachloride	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Chlorobenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Chloroethane	ND	100		µg/L	50	3/25/2021 4:36:42 AM	A76195
Chloroform	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Chloromethane	ND	150		µg/L	50	3/25/2021 4:36:42 AM	A76195
2-Chlorotoluene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
4-Chlorotoluene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
cis-1,2-DCE	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
cis-1,3-Dichloropropene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	3/25/2021 4:36:42 AM	A76195
Dibromochloromethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Dibromomethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2-Dichlorobenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,3-Dichlorobenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,4-Dichlorobenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Dichlorodifluoromethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,1-Dichloroethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,1-Dichloroethene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2-Dichloropropane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,3-Dichloropropane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
2,2-Dichloropropane	ND	100		µg/L	50	3/25/2021 4:36:42 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Logos Julander Federal 1E
Collection Date: 3/12/2021 10:09:00 AM
Lab ID: 2103693-002 **Matrix:** AQUEOUS **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
1,1-Dichloropropene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Hexachlorobutadiene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
2-Hexanone	ND	500		µg/L	50	3/25/2021 4:36:42 AM	A76195
Isopropylbenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
4-Isopropyltoluene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
4-Methyl-2-pentanone	ND	500		µg/L	50	3/25/2021 4:36:42 AM	A76195
Methylene Chloride	ND	150		µg/L	50	3/25/2021 4:36:42 AM	A76195
n-Butylbenzene	ND	150		µg/L	50	3/25/2021 4:36:42 AM	A76195
n-Propylbenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
sec-Butylbenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Styrene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
tert-Butylbenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	3/25/2021 4:36:42 AM	A76195
Tetrachloroethene (PCE)	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
trans-1,2-DCE	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
trans-1,3-Dichloropropene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2,3-Trichlorobenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2,4-Trichlorobenzene	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,1,1-Trichloroethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,1,2-Trichloroethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Trichloroethene (TCE)	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Trichlorofluoromethane	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
1,2,3-Trichloropropane	ND	100		µg/L	50	3/25/2021 4:36:42 AM	A76195
Vinyl chloride	ND	50		µg/L	50	3/25/2021 4:36:42 AM	A76195
Xylenes, Total	7600	75		µg/L	50	3/25/2021 4:36:42 AM	A76195
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%Rec	50	3/25/2021 4:36:42 AM	A76195
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	50	3/25/2021 4:36:42 AM	A76195
Surr: Dibromofluoromethane	99.8	70-130		%Rec	50	3/25/2021 4:36:42 AM	A76195
Surr: Toluene-d8	105	70-130		%Rec	50	3/25/2021 4:36:42 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Logos Julander Federal 1E
Collection Date: 3/12/2021 9:49:00 AM
Lab ID: 2103693-003 **Matrix:** AQUEOUS **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	3.7	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Toluene	6.6	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Ethylbenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2,4-Trimethylbenzene	8.4	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,3,5-Trimethylbenzene	9.1	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Naphthalene	ND	2.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1-Methylnaphthalene	ND	4.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
2-Methylnaphthalene	ND	4.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Acetone	ND	10		µg/L	1	3/25/2021 5:03:34 AM	A76195
Bromobenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Bromodichloromethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Bromoform	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Bromomethane	ND	3.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
2-Butanone	ND	10		µg/L	1	3/25/2021 5:03:34 AM	A76195
Carbon disulfide	ND	10		µg/L	1	3/25/2021 5:03:34 AM	A76195
Carbon Tetrachloride	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Chlorobenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Chloroethane	ND	2.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Chloroform	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Chloromethane	ND	3.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
2-Chlorotoluene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
4-Chlorotoluene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
cis-1,2-DCE	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Dibromochloromethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Dibromomethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,1-Dichloroethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,1-Dichloroethene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2-Dichloropropane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,3-Dichloropropane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
2,2-Dichloropropane	ND	2.0		µg/L	1	3/25/2021 5:03:34 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Logos Julander Federal 1E
Collection Date: 3/12/2021 9:49:00 AM
Lab ID: 2103693-003 **Matrix:** AQUEOUS **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Hexachlorobutadiene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
2-Hexanone	ND	10		µg/L	1	3/25/2021 5:03:34 AM	A76195
Isopropylbenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
4-Isopropyltoluene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
4-Methyl-2-pentanone	ND	10		µg/L	1	3/25/2021 5:03:34 AM	A76195
Methylene Chloride	ND	3.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
n-Butylbenzene	ND	3.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
n-Propylbenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
sec-Butylbenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Styrene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
tert-Butylbenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
trans-1,2-DCE	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Trichlorofluoromethane	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Vinyl chloride	ND	1.0		µg/L	1	3/25/2021 5:03:34 AM	A76195
Xylenes, Total	74	1.5		µg/L	1	3/25/2021 5:03:34 AM	A76195
Surr: 1,2-Dichloroethane-d4	84.8	70-130		%Rec	1	3/25/2021 5:03:34 AM	A76195
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	3/25/2021 5:03:34 AM	A76195
Surr: Dibromofluoromethane	89.0	70-130		%Rec	1	3/25/2021 5:03:34 AM	A76195
Surr: Toluene-d8	105	70-130		%Rec	1	3/25/2021 5:03:34 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Logos Julander Federal 1E
Collection Date: 3/12/2021 10:35:00 AM
Lab ID: 2103693-004 **Matrix:** AQUEOUS **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	6300	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Toluene	17000	1000		µg/L	1E+	3/25/2021 5:30:29 AM	A76195
Ethylbenzene	930	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2,4-Trimethylbenzene	550	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,3,5-Trimethylbenzene	220	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Naphthalene	ND	200		µg/L	100	3/25/2021 5:57:22 AM	A76195
1-Methylnaphthalene	ND	400		µg/L	100	3/25/2021 5:57:22 AM	A76195
2-Methylnaphthalene	ND	400		µg/L	100	3/25/2021 5:57:22 AM	A76195
Acetone	ND	1000		µg/L	100	3/25/2021 5:57:22 AM	A76195
Bromobenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Bromodichloromethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Bromoform	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Bromomethane	ND	300		µg/L	100	3/25/2021 5:57:22 AM	A76195
2-Butanone	ND	1000		µg/L	100	3/25/2021 5:57:22 AM	A76195
Carbon disulfide	ND	1000		µg/L	100	3/25/2021 5:57:22 AM	A76195
Carbon Tetrachloride	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Chlorobenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Chloroethane	ND	200		µg/L	100	3/25/2021 5:57:22 AM	A76195
Chloroform	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Chloromethane	ND	300		µg/L	100	3/25/2021 5:57:22 AM	A76195
2-Chlorotoluene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
4-Chlorotoluene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
cis-1,2-DCE	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
cis-1,3-Dichloropropene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	3/25/2021 5:57:22 AM	A76195
Dibromochloromethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Dibromomethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2-Dichlorobenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,3-Dichlorobenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,4-Dichlorobenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Dichlorodifluoromethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,1-Dichloroethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,1-Dichloroethene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2-Dichloropropane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,3-Dichloropropane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
2,2-Dichloropropane	ND	200		µg/L	100	3/25/2021 5:57:22 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Logos Julander Federal 1E
Collection Date: 3/12/2021 10:35:00 AM
Lab ID: 2103693-004 **Matrix:** AQUEOUS **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
1,1-Dichloropropene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Hexachlorobutadiene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
2-Hexanone	ND	1000		µg/L	100	3/25/2021 5:57:22 AM	A76195
Isopropylbenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
4-Isopropyltoluene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
4-Methyl-2-pentanone	ND	1000		µg/L	100	3/25/2021 5:57:22 AM	A76195
Methylene Chloride	ND	300		µg/L	100	3/25/2021 5:57:22 AM	A76195
n-Butylbenzene	ND	300		µg/L	100	3/25/2021 5:57:22 AM	A76195
n-Propylbenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
sec-Butylbenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Styrene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
tert-Butylbenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,1,2,2-Tetrachloroethane	ND	200		µg/L	100	3/25/2021 5:57:22 AM	A76195
Tetrachloroethene (PCE)	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
trans-1,2-DCE	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
trans-1,3-Dichloropropene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2,3-Trichlorobenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2,4-Trichlorobenzene	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,1,1-Trichloroethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,1,2-Trichloroethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Trichloroethene (TCE)	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Trichlorofluoromethane	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
1,2,3-Trichloropropane	ND	200		µg/L	100	3/25/2021 5:57:22 AM	A76195
Vinyl chloride	ND	100		µg/L	100	3/25/2021 5:57:22 AM	A76195
Xylenes, Total	9000	150		µg/L	100	3/25/2021 5:57:22 AM	A76195
Surr: 1,2-Dichloroethane-d4	92.0	70-130		%Rec	100	3/25/2021 5:57:22 AM	A76195
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	100	3/25/2021 5:57:22 AM	A76195
Surr: Dibromofluoromethane	99.2	70-130		%Rec	100	3/25/2021 5:57:22 AM	A76195
Surr: Toluene-d8	105	70-130		%Rec	100	3/25/2021 5:57:22 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: Logos Julander Federal 1E **Collection Date:**
Lab ID: 2103693-005 **Matrix:** TRIP BLANK **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Toluene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Ethylbenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Naphthalene	ND	2.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1-Methylnaphthalene	ND	4.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
2-Methylnaphthalene	ND	4.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Acetone	ND	10		µg/L	1	3/25/2021 7:18:03 AM	A76195
Bromobenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Bromodichloromethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Bromoform	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Bromomethane	ND	3.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
2-Butanone	ND	10		µg/L	1	3/25/2021 7:18:03 AM	A76195
Carbon disulfide	ND	10		µg/L	1	3/25/2021 7:18:03 AM	A76195
Carbon Tetrachloride	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Chlorobenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Chloroethane	ND	2.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Chloroform	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Chloromethane	ND	3.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
2-Chlorotoluene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
4-Chlorotoluene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
cis-1,2-DCE	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Dibromochloromethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Dibromomethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,1-Dichloroethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,1-Dichloroethene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2-Dichloropropane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,3-Dichloropropane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
2,2-Dichloropropane	ND	2.0		µg/L	1	3/25/2021 7:18:03 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Value above quantitation range
H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit
P	Sample pH Not In Range
PQL	Practical Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix

Analytical Report
Lab Order **2103693**
Date Reported: **3/25/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: Logos Julander Federal 1E **Collection Date:**
Lab ID: 2103693-005 **Matrix:** TRIP BLANK **Received Date:** 3/13/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Hexachlorobutadiene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
2-Hexanone	ND	10		µg/L	1	3/25/2021 7:18:03 AM	A76195
Isopropylbenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
4-Isopropyltoluene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
4-Methyl-2-pentanone	ND	10		µg/L	1	3/25/2021 7:18:03 AM	A76195
Methylene Chloride	ND	3.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
n-Butylbenzene	ND	3.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
n-Propylbenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
sec-Butylbenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Styrene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
tert-Butylbenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
trans-1,2-DCE	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Trichlorofluoromethane	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Vinyl chloride	ND	1.0		µg/L	1	3/25/2021 7:18:03 AM	A76195
Xylenes, Total	ND	1.5		µg/L	1	3/25/2021 7:18:03 AM	A76195
Surr: 1,2-Dichloroethane-d4	99.2	70-130		%Rec	1	3/25/2021 7:18:03 AM	A76195
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	3/25/2021 7:18:03 AM	A76195
Surr: Dibromofluoromethane	102	70-130		%Rec	1	3/25/2021 7:18:03 AM	A76195
Surr: Toluene-d8	103	70-130		%Rec	1	3/25/2021 7:18:03 AM	A76195

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103693**
25-Mar-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **100ng lcs4**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **A76195**	RunNo: **76195**
Prep Date:	Analysis Date: **3/24/2021**	SeqNo: **2697617** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.6	70	130			
Toluene	19	1.0	20.00	0	95.1	70	130			
Chlorobenzene	18	1.0	20.00	0	91.8	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	103	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	91.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.0	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.4	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.9		10.00		98.9	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A76195**	RunNo: **76195**
Prep Date:	Analysis Date: **3/24/2021**	SeqNo: **2697637** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103693**
25-Mar-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **A76195**	RunNo: **76195**
Prep Date:	Analysis Date: **3/24/2021**	SeqNo: **2697637** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2103693**
25-Mar-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**							
Client ID: **PBW**	Batch ID: **A76195**	RunNo: **76195**							
Prep Date:	Analysis Date: **3/24/2021**	SeqNo: **2697637**	Units: **µg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Services | Work Order Number: 2103693 | RcptNo: 1

Received By: Erin Melendrez 3/13/2021 10:00:00 AM

Completed By: Erin Melendrez 3/13/2021 2:51:05 PM

Reviewed By: CEN 3/15/21

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SPA 3.15.21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good				

Chain-of-Custody Record

Client: Animas Environmenal Services, LLC

Mailing Address: P.O. Box 8
Farmington, NM 87499-0008

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other________________
☐ EDD (Type) ____________________________

Turn-Around Time:
X Standard Rush______

Project Name: Logos Julander Federal #1E

Project #:

Project Manager: David Reese

Sampler: GB/CL

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.9+0.2(CF)=3.1°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2103693	8260 Full List												Air Bubbles (Y or N)
3-12-21	9:28	H_2O	MW-1	3 - 40 ml VOA	HgCl2	-001	X												
3-12-21	10:09	H_2O	MW-3	3 - 40 ml VOA	HgCl2	-002	X												
3-12-21	9:49	H_2O	MW-4	3 - 40 ml VOA	HgCl2	-003	X												
3-12-21	10:35	H_2O	MW-9	3 - 40 ml VOA	HgCl2	-004	X												
		H2O	Trip Blank	2 - 40 mL VOA	~~HCl~~ $HgCl_2$ ENM 3/15/21	-005	X												

Date	Time	Relinquished by:	Received by:	Date	Time
3/12/21	1648	[signature]	[signature]	3/12/21	1648
3/12/21	1811	[signature]	[signature] courier	3/13/21	1000

Remarks: Call with Questions. Direct Bill to Logos. MW-4 and MW-9 had hydrocarbon sheen.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

June 23, 2021

David Reese
Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL:
FAX

RE: Logos Julander Federal 1E OrderNo.: 2106655

Dear David Reese:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/11/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2106655**
Date Reported: **6/23/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Logos Julander Federal 1E
Collection Date: 6/10/2021 9:10:00 AM
Lab ID: 2106655-001 **Matrix:** AQUEOUS **Received Date:** 6/11/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	14000	500		µg/L	500	6/18/2021 6:07:35 PM	R79222
Toluene	20000	500		µg/L	500	6/18/2021 6:07:35 PM	R79222
Ethylbenzene	980	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2,4-Trimethylbenzene	380	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,3,5-Trimethylbenzene	150	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2-Dichloroethane (EDC)	ND	20		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Naphthalene	100	100		µg/L	50	6/18/2021 6:35:12 PM	R79222
1-Methylnaphthalene	ND	200		µg/L	50	6/18/2021 6:35:12 PM	R79222
2-Methylnaphthalene	ND	200		µg/L	50	6/18/2021 6:35:12 PM	R79222
Acetone	ND	500		µg/L	50	6/18/2021 6:35:12 PM	R79222
Bromobenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Bromodichloromethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Bromoform	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Bromomethane	ND	150		µg/L	50	6/18/2021 6:35:12 PM	R79222
2-Butanone	ND	500		µg/L	50	6/18/2021 6:35:12 PM	R79222
Carbon disulfide	ND	500		µg/L	50	6/18/2021 6:35:12 PM	R79222
Carbon Tetrachloride	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Chlorobenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Chloroethane	ND	100		µg/L	50	6/18/2021 6:35:12 PM	R79222
Chloroform	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Chloromethane	ND	150		µg/L	50	6/18/2021 6:35:12 PM	R79222
2-Chlorotoluene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
4-Chlorotoluene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
cis-1,2-DCE	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/18/2021 6:35:12 PM	R79222
Dibromochloromethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Dibromomethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2-Dichlorobenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,3-Dichlorobenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,4-Dichlorobenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Dichlorodifluoromethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,1-Dichloroethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,1-Dichloroethene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2-Dichloropropane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,3-Dichloropropane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
2,2-Dichloropropane	ND	100		µg/L	50	6/18/2021 6:35:12 PM	R79222

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2106655**
Date Reported: **6/23/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Logos Julander Federal 1E
Collection Date: 6/10/2021 9:10:00 AM
Lab ID: 2106655-001 **Matrix:** AQUEOUS **Received Date:** 6/11/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Hexachlorobutadiene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
2-Hexanone	ND	500		µg/L	50	6/18/2021 6:35:12 PM	R79222
Isopropylbenzene	53	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
4-Isopropyltoluene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
4-Methyl-2-pentanone	ND	500		µg/L	50	6/18/2021 6:35:12 PM	R79222
Methylene Chloride	ND	150		µg/L	50	6/18/2021 6:35:12 PM	R79222
n-Butylbenzene	ND	150		µg/L	50	6/18/2021 6:35:12 PM	R79222
n-Propylbenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
sec-Butylbenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Styrene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
tert-Butylbenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/18/2021 6:35:12 PM	R79222
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
trans-1,2-DCE	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,1,1-Trichloroethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,1,2-Trichloroethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Trichloroethene (TCE)	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Trichlorofluoromethane	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
1,2,3-Trichloropropane	ND	100		µg/L	50	6/18/2021 6:35:12 PM	R79222
Vinyl chloride	ND	50		µg/L	50	6/18/2021 6:35:12 PM	R79222
Xylenes, Total	8900	75		µg/L	50	6/18/2021 6:35:12 PM	R79222
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	50	6/18/2021 6:35:12 PM	R79222
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	50	6/18/2021 6:35:12 PM	R79222
Surr: Dibromofluoromethane	106	70-130		%Rec	50	6/18/2021 6:35:12 PM	R79222
Surr: Toluene-d8	107	70-130		%Rec	50	6/18/2021 6:35:12 PM	R79222

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2106655**
Date Reported: **6/23/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Logos Julander Federal 1E
Collection Date: 6/10/2021 9:41:00 AM
Lab ID: 2106655-002 **Matrix:** AQUEOUS **Received Date:** 6/11/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	150	10		µg/L	10	6/21/2021 4:14:16 PM	R79245
Toluene	47	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Ethylbenzene	26	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2,4-Trimethylbenzene	47	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,3,5-Trimethylbenzene	26	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Naphthalene	6.3	2.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1-Methylnaphthalene	ND	4.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
2-Methylnaphthalene	5.2	4.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Acetone	ND	10		µg/L	1	6/18/2021 7:02:42 PM	R79222
Bromobenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Bromodichloromethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Bromoform	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Bromomethane	ND	3.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
2-Butanone	ND	10		µg/L	1	6/18/2021 7:02:42 PM	R79222
Carbon disulfide	ND	10		µg/L	1	6/18/2021 7:02:42 PM	R79222
Carbon Tetrachloride	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Chlorobenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Chloroethane	ND	2.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Chloroform	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Chloromethane	ND	3.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
2-Chlorotoluene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
4-Chlorotoluene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
cis-1,2-DCE	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Dibromochloromethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Dibromomethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,1-Dichloroethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,1-Dichloroethene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2-Dichloropropane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,3-Dichloropropane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
2,2-Dichloropropane	ND	2.0		µg/L	1	6/18/2021 7:02:42 PM	R79222

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2106655**
Date Reported: **6/23/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Logos Julander Federal 1E
Collection Date: 6/10/2021 9:41:00 AM
Lab ID: 2106655-002 **Matrix:** AQUEOUS **Received Date:** 6/11/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Hexachlorobutadiene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
2-Hexanone	ND	10		µg/L	1	6/18/2021 7:02:42 PM	R79222
Isopropylbenzene	2.8	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
4-Isopropyltoluene	3.6	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
4-Methyl-2-pentanone	ND	10		µg/L	1	6/18/2021 7:02:42 PM	R79222
Methylene Chloride	ND	3.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
n-Butylbenzene	ND	3.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
n-Propylbenzene	2.6	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
sec-Butylbenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Styrene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
tert-Butylbenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
trans-1,2-DCE	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Trichlorofluoromethane	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Vinyl chloride	ND	1.0		µg/L	1	6/18/2021 7:02:42 PM	R79222
Xylenes, Total	330	15		µg/L	10	6/21/2021 4:14:16 PM	R79245
Surr: 1,2-Dichloroethane-d4	81.8	70-130		%Rec	1	6/18/2021 7:02:42 PM	R79222
Surr: 4-Bromofluorobenzene	122	70-130		%Rec	1	6/18/2021 7:02:42 PM	R79222
Surr: Dibromofluoromethane	77.2	70-130		%Rec	1	6/18/2021 7:02:42 PM	R79222
Surr: Toluene-d8	107	70-130		%Rec	1	6/18/2021 7:02:42 PM	R79222

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2106655**
Date Reported: **6/23/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Logos Julander Federal 1E
Collection Date: 6/10/2021 10:07:00 AM
Lab ID: 2106655-003 **Matrix:** AQUEOUS **Received Date:** 6/11/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	9400	500		µg/L	500	6/18/2021 7:30:10 PM	R79222
Toluene	29000	500		µg/L	500	6/18/2021 7:30:10 PM	R79222
Ethylbenzene	1600	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2,4-Trimethylbenzene	950	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,3,5-Trimethylbenzene	370	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Naphthalene	170	100		µg/L	50	6/18/2021 7:57:41 PM	R79222
1-Methylnaphthalene	ND	200		µg/L	50	6/18/2021 7:57:41 PM	R79222
2-Methylnaphthalene	ND	200		µg/L	50	6/18/2021 7:57:41 PM	R79222
Acetone	ND	500		µg/L	50	6/18/2021 7:57:41 PM	R79222
Bromobenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Bromodichloromethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Bromoform	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Bromomethane	ND	150		µg/L	50	6/18/2021 7:57:41 PM	R79222
2-Butanone	ND	500		µg/L	50	6/18/2021 7:57:41 PM	R79222
Carbon disulfide	ND	500		µg/L	50	6/18/2021 7:57:41 PM	R79222
Carbon Tetrachloride	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Chlorobenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Chloroethane	ND	100		µg/L	50	6/18/2021 7:57:41 PM	R79222
Chloroform	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Chloromethane	ND	150		µg/L	50	6/18/2021 7:57:41 PM	R79222
2-Chlorotoluene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
4-Chlorotoluene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
cis-1,2-DCE	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
cis-1,3-Dichloropropene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	6/18/2021 7:57:41 PM	R79222
Dibromochloromethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Dibromomethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2-Dichlorobenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,3-Dichlorobenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,4-Dichlorobenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Dichlorodifluoromethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,1-Dichloroethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,1-Dichloroethene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2-Dichloropropane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,3-Dichloropropane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
2,2-Dichloropropane	ND	100		µg/L	50	6/18/2021 7:57:41 PM	R79222

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2106655**
Date Reported: **6/23/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Logos Julander Federal 1E
Collection Date: 6/10/2021 10:07:00 AM
Lab ID: 2106655-003 **Matrix:** AQUEOUS **Received Date:** 6/11/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Hexachlorobutadiene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
2-Hexanone	ND	500		µg/L	50	6/18/2021 7:57:41 PM	R79222
Isopropylbenzene	140	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
4-Isopropyltoluene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
4-Methyl-2-pentanone	ND	500		µg/L	50	6/18/2021 7:57:41 PM	R79222
Methylene Chloride	ND	150		µg/L	50	6/18/2021 7:57:41 PM	R79222
n-Butylbenzene	ND	150		µg/L	50	6/18/2021 7:57:41 PM	R79222
n-Propylbenzene	160	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
sec-Butylbenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Styrene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
tert-Butylbenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	6/18/2021 7:57:41 PM	R79222
Tetrachloroethene (PCE)	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
trans-1,2-DCE	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
trans-1,3-Dichloropropene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2,3-Trichlorobenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2,4-Trichlorobenzene	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,1,1-Trichloroethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,1,2-Trichloroethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Trichloroethene (TCE)	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Trichlorofluoromethane	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
1,2,3-Trichloropropane	ND	100		µg/L	50	6/18/2021 7:57:41 PM	R79222
Vinyl chloride	ND	50		µg/L	50	6/18/2021 7:57:41 PM	R79222
Xylenes, Total	14000	750		µg/L	500	6/18/2021 7:30:10 PM	R79222
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	50	6/18/2021 7:57:41 PM	R79222
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	50	6/18/2021 7:57:41 PM	R79222
Surr: Dibromofluoromethane	84.9	70-130		%Rec	50	6/18/2021 7:57:41 PM	R79222
Surr: Toluene-d8	108	70-130		%Rec	50	6/18/2021 7:57:41 PM	R79222

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2106655**
Date Reported: **6/23/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: Logos Julander Federal 1E **Collection Date:**
Lab ID: 2106655-004 **Matrix:** TRIP BLANK **Received Date:** 6/11/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Toluene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Ethylbenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Naphthalene	ND	2.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1-Methylnaphthalene	ND	4.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
2-Methylnaphthalene	ND	4.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Acetone	ND	10		µg/L	1	6/21/2021 4:41:41 PM	R79245
Bromobenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Bromodichloromethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Bromoform	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Bromomethane	ND	3.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
2-Butanone	ND	10		µg/L	1	6/21/2021 4:41:41 PM	R79245
Carbon disulfide	ND	10		µg/L	1	6/21/2021 4:41:41 PM	R79245
Carbon Tetrachloride	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Chlorobenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Chloroethane	ND	2.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Chloroform	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Chloromethane	ND	3.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
2-Chlorotoluene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
4-Chlorotoluene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
cis-1,2-DCE	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Dibromochloromethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Dibromomethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,1-Dichloroethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,1-Dichloroethene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2-Dichloropropane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,3-Dichloropropane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
2,2-Dichloropropane	ND	2.0		µg/L	1	6/21/2021 4:41:41 PM	R79245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2106655**
Date Reported: **6/23/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: Logos Julander Federal 1E **Collection Date:**
Lab ID: 2106655-004 **Matrix:** TRIP BLANK **Received Date:** 6/11/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Hexachlorobutadiene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
2-Hexanone	ND	10		µg/L	1	6/21/2021 4:41:41 PM	R79245
Isopropylbenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
4-Isopropyltoluene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
4-Methyl-2-pentanone	ND	10		µg/L	1	6/21/2021 4:41:41 PM	R79245
Methylene Chloride	ND	3.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
n-Butylbenzene	ND	3.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
n-Propylbenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
sec-Butylbenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Styrene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
tert-Butylbenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
trans-1,2-DCE	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Trichlorofluoromethane	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Vinyl chloride	ND	1.0		µg/L	1	6/21/2021 4:41:41 PM	R79245
Xylenes, Total	ND	1.5		µg/L	1	6/21/2021 4:41:41 PM	R79245
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	6/21/2021 4:41:41 PM	R79245
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	6/21/2021 4:41:41 PM	R79245
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/21/2021 4:41:41 PM	R79245
Surr: Toluene-d8	105	70-130		%Rec	1	6/21/2021 4:41:41 PM	R79245

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106655**
23-Jun-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R79222**	RunNo: **79222**
Prep Date:	Analysis Date: **6/18/2021**	SeqNo: **2781505** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.9	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	97.5	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R79222**	RunNo: **79222**
Prep Date:	Analysis Date: **6/18/2021**	SeqNo: **2781550** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106655**
23-Jun-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R79222**	RunNo: **79222**
Prep Date:	Analysis Date: **6/18/2021**	SeqNo: **2781550** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106655**
23-Jun-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R79222**	RunNo: **79222**
Prep Date:	Analysis Date: **6/18/2021**	SeqNo: **2781550** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		109	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R79245**	RunNo: **79245**
Prep Date:	Analysis Date: **6/21/2021**	SeqNo: **2782887** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0	86.3	70	130			
Toluene	19	1.0	20.00	0	94.4	70	130			
Chlorobenzene	19	1.0	20.00	0	95.5	70	130			
1,1-Dichloroethene	16	1.0	20.00	0	82.0	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	87.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.8	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.7	70	130			
Surr: Toluene-d8	9.7		10.00		97.4	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R79245**	RunNo: **79245**
Prep Date:	Analysis Date: **6/21/2021**	SeqNo: **2782925** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106655**
23-Jun-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R79245**	RunNo: **79245**
Prep Date:	Analysis Date: **6/21/2021**	SeqNo: **2782925** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
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PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2106655**
23-Jun-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**							
Client ID: **PBW**	Batch ID: **R79245**	RunNo: **79245**							
Prep Date:	Analysis Date: **6/21/2021**	SeqNo: **2782925**	Units: **µg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Animas Environmental Services** Work Order Number: **2106655** RcptNo: **1**

Received By: **Juan Rojas** **6/11/2021 7:30:00 AM**

Completed By: **Desiree Dominguez** **6/11/2021 8:37:02 AM**

Reviewed By: 6/11/21

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: KPG 6/11/21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			
2	0.4	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Client: LLC Animas Environmental Svc

Mailing Address: 624 E Comanche Farmington NM 87401

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other ________

☐ EDD (Type) ________

Turn-Around Time: ☑ Standard ☐ Rush ________

Project Name: Logos Julander Federal #1E

Project #:

Project Manager: David Reese

Sampler: CL + LC

On Ice: ☑ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): 1.9-0.2=1.7; 0.6-0.2=0.4

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2106655	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)						
6-10-21	9:10	H_2O	MW-3	3x40mL VOA	$HgCl_2$ x3	-001								X								
6-10-21	9:41	H_2O	MW-4	3x40 mL VOA	$HgCl_2$ x3	-002								X								
6-10-21	10:07	H_2O	MW-9	3x40mL VOA	$HgCl_2$ x3	-003								X								
			Trip Blank	2x40mL	$HgCl_2$	-004								X								
			-IO 06·11·2021-																			

Date	Time	Relinquished by	Received by	Via	Date	Time
6-10-21	1611 (~~10:54~~)	Larry Cupps	Christine Walt		6/10/21	1611
6/10/21	1730	Christine Walt		Courier	6/11/21	7:30

Remarks: Call w/ Questions.
MW-4 had NAPL Sheen.
MW-9 had 0.04 NAPL.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

September 30, 2021

David Reese
Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL:
FAX:

RE: Logos Julander Federal 1E OrderNo.: 2109B86

Dear David Reese:

Hall Environmental Analysis Laboratory received 3 sample(s) on 9/22/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2109B86**
Date Reported: **9/30/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Logos Julander Federal 1E
Collection Date: 9/21/2021 10:11:00 AM
Lab ID: 2109B86-001 **Matrix:** AQUEOUS **Received Date:** 9/22/2021 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	12000	500		µg/L	500	9/25/2021 12:50:00 AM	R81546
Toluene	13000	500		µg/L	500	9/25/2021 12:50:00 AM	R81546
Ethylbenzene	720	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2,4-Trimethylbenzene	430	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,3,5-Trimethylbenzene	180	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Naphthalene	ND	100		µg/L	50	9/25/2021 1:13:00 AM	R81546
1-Methylnaphthalene	ND	200		µg/L	50	9/25/2021 1:13:00 AM	R81546
2-Methylnaphthalene	ND	200		µg/L	50	9/25/2021 1:13:00 AM	R81546
Acetone	ND	500		µg/L	50	9/25/2021 1:13:00 AM	R81546
Bromobenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Bromodichloromethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Bromoform	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Bromomethane	ND	150		µg/L	50	9/25/2021 1:13:00 AM	R81546
2-Butanone	ND	500		µg/L	50	9/25/2021 1:13:00 AM	R81546
Carbon disulfide	ND	500		µg/L	50	9/25/2021 1:13:00 AM	R81546
Carbon Tetrachloride	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Chlorobenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Chloroethane	ND	100		µg/L	50	9/25/2021 1:13:00 AM	R81546
Chloroform	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Chloromethane	ND	150		µg/L	50	9/25/2021 1:13:00 AM	R81546
2-Chlorotoluene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
4-Chlorotoluene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
cis-1,2-DCE	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/25/2021 1:13:00 AM	R81546
Dibromochloromethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Dibromomethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2-Dichlorobenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,3-Dichlorobenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,4-Dichlorobenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Dichlorodifluoromethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,1-Dichloroethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,1-Dichloroethene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2-Dichloropropane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,3-Dichloropropane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
2,2-Dichloropropane	ND	100		µg/L	50	9/25/2021 1:13:00 AM	R81546

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2109B86**
Date Reported: **9/30/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Logos Julander Federal 1E
Collection Date: 9/21/2021 10:11:00 AM
Lab ID: 2109B86-001 **Matrix:** AQUEOUS **Received Date:** 9/22/2021 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Hexachlorobutadiene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
2-Hexanone	ND	500		µg/L	50	9/25/2021 1:13:00 AM	R81546
Isopropylbenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
4-Isopropyltoluene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
4-Methyl-2-pentanone	ND	500		µg/L	50	9/25/2021 1:13:00 AM	R81546
Methylene Chloride	ND	150		µg/L	50	9/25/2021 1:13:00 AM	R81546
n-Butylbenzene	ND	150		µg/L	50	9/25/2021 1:13:00 AM	R81546
n-Propylbenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
sec-Butylbenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Styrene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
tert-Butylbenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/25/2021 1:13:00 AM	R81546
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
trans-1,2-DCE	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,1,1-Trichloroethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,1,2-Trichloroethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Trichloroethene (TCE)	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Trichlorofluoromethane	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
1,2,3-Trichloropropane	ND	100		µg/L	50	9/25/2021 1:13:00 AM	R81546
Vinyl chloride	ND	50		µg/L	50	9/25/2021 1:13:00 AM	R81546
Xylenes, Total	9100	75		µg/L	50	9/25/2021 1:13:00 AM	R81546
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	50	9/25/2021 1:13:00 AM	R81546
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	50	9/25/2021 1:13:00 AM	R81546
Surr: Dibromofluoromethane	99.6	70-130		%Rec	50	9/25/2021 1:13:00 AM	R81546
Surr: Toluene-d8	97.9	70-130		%Rec	50	9/25/2021 1:13:00 AM	R81546

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2109B86**
Date Reported: **9/30/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Logos Julander Federal 1E
Collection Date: 9/21/2021 10:41:00 AM
Lab ID: 2109B86-002 **Matrix:** AQUEOUS **Received Date:** 9/22/2021 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	870	50		µg/L	50	9/25/2021 3:25:00 PM	R81590
Toluene	1400	50		µg/L	50	9/25/2021 3:25:00 PM	R81590
Ethylbenzene	100	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2,4-Trimethylbenzene	48	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,3,5-Trimethylbenzene	22	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Naphthalene	ND	10		µg/L	5	9/25/2021 1:59:00 AM	R81546
1-Methylnaphthalene	ND	20		µg/L	5	9/25/2021 1:59:00 AM	R81546
2-Methylnaphthalene	ND	20		µg/L	5	9/25/2021 1:59:00 AM	R81546
Acetone	ND	50		µg/L	5	9/25/2021 1:59:00 AM	R81546
Bromobenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Bromodichloromethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Bromoform	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Bromomethane	ND	15		µg/L	5	9/25/2021 1:59:00 AM	R81546
2-Butanone	ND	50		µg/L	5	9/25/2021 1:59:00 AM	R81546
Carbon disulfide	ND	50		µg/L	5	9/25/2021 1:59:00 AM	R81546
Carbon Tetrachloride	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Chlorobenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Chloroethane	ND	10		µg/L	5	9/25/2021 1:59:00 AM	R81546
Chloroform	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Chloromethane	ND	15		µg/L	5	9/25/2021 1:59:00 AM	R81546
2-Chlorotoluene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
4-Chlorotoluene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
cis-1,2-DCE	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	9/25/2021 1:59:00 AM	R81546
Dibromochloromethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Dibromomethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2-Dichlorobenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,3-Dichlorobenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,4-Dichlorobenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Dichlorodifluoromethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,1-Dichloroethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,1-Dichloroethene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2-Dichloropropane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,3-Dichloropropane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
2,2-Dichloropropane	ND	10		µg/L	5	9/25/2021 1:59:00 AM	R81546

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2109B86**
Date Reported: **9/30/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Logos Julander Federal 1E
Collection Date: 9/21/2021 10:41:00 AM
Lab ID: 2109B86-002 **Matrix:** AQUEOUS **Received Date:** 9/22/2021 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Hexachlorobutadiene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
2-Hexanone	ND	50		µg/L	5	9/25/2021 1:59:00 AM	R81546
Isopropylbenzene	6.1	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
4-Isopropyltoluene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
4-Methyl-2-pentanone	ND	50		µg/L	5	9/25/2021 1:59:00 AM	R81546
Methylene Chloride	ND	15		µg/L	5	9/25/2021 1:59:00 AM	R81546
n-Butylbenzene	ND	15		µg/L	5	9/25/2021 1:59:00 AM	R81546
n-Propylbenzene	6.5	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
sec-Butylbenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Styrene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
tert-Butylbenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	9/25/2021 1:59:00 AM	R81546
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
trans-1,2-DCE	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,1,1-Trichloroethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,1,2-Trichloroethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Trichloroethene (TCE)	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Trichlorofluoromethane	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
1,2,3-Trichloropropane	ND	10		µg/L	5	9/25/2021 1:59:00 AM	R81546
Vinyl chloride	ND	5.0		µg/L	5	9/25/2021 1:59:00 AM	R81546
Xylenes, Total	840	7.5		µg/L	5	9/25/2021 1:59:00 AM	R81546
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	5	9/25/2021 1:59:00 AM	R81546
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	5	9/25/2021 1:59:00 AM	R81546
Surr: Dibromofluoromethane	94.5	70-130		%Rec	5	9/25/2021 1:59:00 AM	R81546
Surr: Toluene-d8	102	70-130		%Rec	5	9/25/2021 1:59:00 AM	R81546

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2109B86**
Date Reported: **9/30/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Logos Julander Federal 1E
Collection Date: 9/21/2021 11:16:00 AM
Lab ID: 2109B86-003 **Matrix:** AQUEOUS **Received Date:** 9/22/2021 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	8600	500		µg/L	500	9/25/2021 2:45:00 AM	R81546
Toluene	24000	500		µg/L	500	9/25/2021 2:45:00 AM	R81546
Ethylbenzene	1100	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2,4-Trimethylbenzene	640	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,3,5-Trimethylbenzene	240	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Naphthalene	110	100		µg/L	50	9/25/2021 3:09:00 AM	R81546
1-Methylnaphthalene	ND	200		µg/L	50	9/25/2021 3:09:00 AM	R81546
2-Methylnaphthalene	ND	200		µg/L	50	9/25/2021 3:09:00 AM	R81546
Acetone	ND	500		µg/L	50	9/25/2021 3:09:00 AM	R81546
Bromobenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Bromodichloromethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Bromoform	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Bromomethane	ND	150		µg/L	50	9/25/2021 3:09:00 AM	R81546
2-Butanone	ND	500		µg/L	50	9/25/2021 3:09:00 AM	R81546
Carbon disulfide	ND	500		µg/L	50	9/25/2021 3:09:00 AM	R81546
Carbon Tetrachloride	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Chlorobenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Chloroethane	ND	100		µg/L	50	9/25/2021 3:09:00 AM	R81546
Chloroform	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Chloromethane	ND	150		µg/L	50	9/25/2021 3:09:00 AM	R81546
2-Chlorotoluene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
4-Chlorotoluene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
cis-1,2-DCE	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
cis-1,3-Dichloropropene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	9/25/2021 3:09:00 AM	R81546
Dibromochloromethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Dibromomethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2-Dichlorobenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,3-Dichlorobenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,4-Dichlorobenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Dichlorodifluoromethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,1-Dichloroethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,1-Dichloroethene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2-Dichloropropane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,3-Dichloropropane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
2,2-Dichloropropane	ND	100		µg/L	50	9/25/2021 3:09:00 AM	R81546

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2109B86**
Date Reported: **9/30/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Logos Julander Federal 1E
Collection Date: 9/21/2021 11:16:00 AM
Lab ID: 2109B86-003 **Matrix:** AQUEOUS **Received Date:** 9/22/2021 7:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Hexachlorobutadiene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
2-Hexanone	ND	500		µg/L	50	9/25/2021 3:09:00 AM	R81546
Isopropylbenzene	83	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
4-Isopropyltoluene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
4-Methyl-2-pentanone	ND	500		µg/L	50	9/25/2021 3:09:00 AM	R81546
Methylene Chloride	ND	150		µg/L	50	9/25/2021 3:09:00 AM	R81546
n-Butylbenzene	ND	150		µg/L	50	9/25/2021 3:09:00 AM	R81546
n-Propylbenzene	89	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
sec-Butylbenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Styrene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
tert-Butylbenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	9/25/2021 3:09:00 AM	R81546
Tetrachloroethene (PCE)	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
trans-1,2-DCE	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
trans-1,3-Dichloropropene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2,3-Trichlorobenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2,4-Trichlorobenzene	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,1,1-Trichloroethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,1,2-Trichloroethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Trichloroethene (TCE)	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Trichlorofluoromethane	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
1,2,3-Trichloropropane	ND	100		µg/L	50	9/25/2021 3:09:00 AM	R81546
Vinyl chloride	ND	50		µg/L	50	9/25/2021 3:09:00 AM	R81546
Xylenes, Total	12000	75		µg/L	50	9/25/2021 3:09:00 AM	R81546
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	50	9/25/2021 3:09:00 AM	R81546
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	50	9/25/2021 3:09:00 AM	R81546
Surr: Dibromofluoromethane	98.2	70-130		%Rec	50	9/25/2021 3:09:00 AM	R81546
Surr: Toluene-d8	99.6	70-130		%Rec	50	9/25/2021 3:09:00 AM	R81546

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2109B86**
30-Sep-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **100ng 8260 lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R81546**	RunNo: **81546**
Prep Date:	Analysis Date: **9/24/2021**	SeqNo: **2882011** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.9	70	130			
Toluene	19	1.0	20.00	0	93.0	70	130			
Chlorobenzene	19	1.0	20.00	0	94.5	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.3	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	92.6	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.8		10.00		97.9	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R81546**	RunNo: **81546**
Prep Date:	Analysis Date: **9/24/2021**	SeqNo: **2882012** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2109B86**
30-Sep-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R81546**	RunNo: **81546**
Prep Date:	Analysis Date: **9/24/2021**	SeqNo: **2882012** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2109B86**
30-Sep-21

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R81546**	RunNo: **81546**
Prep Date:	Analysis Date: **9/24/2021**	SeqNo: **2882012** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
tert-Butyl alcohol	ND	25								
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.8		10.00		98.0	70	130			

Sample ID: **100ng 8260 lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R81590**	RunNo: **81590**
Prep Date:	Analysis Date: **9/25/2021**	SeqNo: **2883304** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	97.5	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R81590**	RunNo: **81590**
Prep Date:	Analysis Date: **9/25/2021**	SeqNo: **2883305** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.6	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.5		10.00		95.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Animas Environmental Services** Work Order Number: **2109B86** RcptNo: 1

Received By: **Cheyenne Cason** **9/22/2021 7:10:00 AM**

Completed By: **Isaiah Ortiz** **9/22/2021 9:56:00 AM**

Reviewed By: KPK 9/22/21

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☑	No ☐	NA ☐
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	

# of preserved bottles checked for pH: (<2 or >12 unless noted)

Adjusted?

Checked by: JR 9/22/21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Not Present			

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: P.O. Box 8
Farmington, NM 87499-0008

Phone #: 505-564-2281

email or Fax#: dreese@animasenvironmental.com

QA/QC Package:
X Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

X Standard Rush

Project Name: Logos Julander Federal #1E

Project #:

Project Manager: David Reese

Sampler: JO / CA

On Ice: X Yes ☐ No

Sample Temperature: 2.4 - 0.1 = 2.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2109B86	8260 Full List	Air Bubbles (Y or N)
9-21-21	10:11 am	H_2O	MW-3	3 - 40 ml VOA	HgCl2	001	X	
9-21-21	10:41 am	H_2O	MW-4	3 - 40 ml VOA	HgCl2	002	X	
9-21-21	11:16 am	H_2O	MW-9	3 - 40 ml VOA	HgCl2	003	X	
		H2O	~~Trip Blank~~	~~2 - 40 mL VOA~~	HCl	~~004~~	X	
			Did not receive. jn 9/22/21					

Date	Time	Relinquished by:	Received by:	Date	Time
9/21/21	1725			9/21/21	1725
9/21/21	1806			9/22/21	0710

Call w/ Questions.
MW-4 had NAPL sheen. MW-9 had NAPL.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

January 03, 2022

David Reese
Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL:
FAX:

RE: Logos Julander Federal 1E OrderNo.: 2112795

Dear David Reese:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/11/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2112795**
Date Reported: **1/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Logos Julander Federal 1E
Collection Date: 12/9/2021 3:14:00 PM
Lab ID: 2112795-001 **Matrix:** AQUEOUS **Received Date:** 12/11/2021 9:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	12000	200		µg/L	200	12/16/2021 12:44:52 PM	R84618
Toluene	11000	200		µg/L	200	12/16/2021 12:44:52 PM	R84618
Ethylbenzene	740	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Methyl tert-butyl ether (MTBE)	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2,4-Trimethylbenzene	510	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,3,5-Trimethylbenzene	220	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2-Dichloroethane (EDC)	ND	20	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2-Dibromoethane (EDB)	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Naphthalene	ND	100	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1-Methylnaphthalene	ND	200	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
2-Methylnaphthalene	ND	200	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Acetone	ND	500	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Bromobenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Bromodichloromethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Bromoform	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Bromomethane	ND	150	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
2-Butanone	ND	500	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Carbon disulfide	ND	500	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Carbon Tetrachloride	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Chlorobenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Chloroethane	ND	100	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Chloroform	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Chloromethane	ND	150	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
2-Chlorotoluene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
4-Chlorotoluene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
cis-1,2-DCE	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
cis-1,3-Dichloropropene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2-Dibromo-3-chloropropane	ND	100	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Dibromochloromethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Dibromomethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2-Dichlorobenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,3-Dichlorobenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,4-Dichlorobenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Dichlorodifluoromethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,1-Dichloroethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,1-Dichloroethene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2-Dichloropropane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,3-Dichloropropane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
2,2-Dichloropropane	ND	100	D	µg/L	50	12/23/2021 3:31:40 PM	R84783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112795**
Date Reported: **1/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-3
Project: Logos Julander Federal 1E
Collection Date: 12/9/2021 3:14:00 PM
Lab ID: 2112795-001 **Matrix:** AQUEOUS **Received Date:** 12/11/2021 9:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Hexachlorobutadiene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
2-Hexanone	ND	500	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Isopropylbenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
4-Isopropyltoluene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
4-Methyl-2-pentanone	ND	500	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Methylene Chloride	ND	150	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
n-Butylbenzene	ND	150	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
n-Propylbenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
sec-Butylbenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Styrene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
tert-Butylbenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,1,1,2-Tetrachloroethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,1,2,2-Tetrachloroethane	ND	100	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Tetrachloroethene (PCE)	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
trans-1,2-DCE	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
trans-1,3-Dichloropropene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2,3-Trichlorobenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2,4-Trichlorobenzene	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,1,1-Trichloroethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,1,2-Trichloroethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Trichloroethene (TCE)	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Trichlorofluoromethane	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
1,2,3-Trichloropropane	ND	100	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Vinyl chloride	ND	50	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Xylenes, Total	9300	75	D	µg/L	50	12/23/2021 3:31:40 PM	R84783
Surr: 1,2-Dichloroethane-d4	90.2	70-130	D	%Rec	50	12/23/2021 3:31:40 PM	R84783
Surr: 4-Bromofluorobenzene	95.1	70-130	D	%Rec	50	12/23/2021 3:31:40 PM	R84783
Surr: Dibromofluoromethane	85.7	70-130	D	%Rec	50	12/23/2021 3:31:40 PM	R84783
Surr: Toluene-d8	105	70-130	D	%Rec	50	12/23/2021 3:31:40 PM	R84783

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112795**
Date Reported: **1/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Logos Julander Federal 1E
Collection Date: 12/9/2021 12:48:00 PM
Lab ID: 2112795-002 **Matrix:** AQUEOUS **Received Date:** 12/11/2021 9:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	25	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Toluene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Ethylbenzene	21	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Methyl tert-butyl ether (MTBE)	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2,4-Trimethylbenzene	31	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,3,5-Trimethylbenzene	15	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2-Dichloroethane (EDC)	ND	4.0	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2-Dibromoethane (EDB)	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Naphthalene	ND	20	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1-Methylnaphthalene	ND	40	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
2-Methylnaphthalene	ND	40	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Acetone	ND	100	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Bromobenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Bromodichloromethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Bromoform	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Bromomethane	ND	30	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
2-Butanone	ND	100	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Carbon disulfide	ND	100	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Carbon Tetrachloride	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Chlorobenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Chloroethane	ND	20	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Chloroform	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Chloromethane	ND	30	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
2-Chlorotoluene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
4-Chlorotoluene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
cis-1,2-DCE	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
cis-1,3-Dichloropropene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2-Dibromo-3-chloropropane	ND	20	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Dibromochloromethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Dibromomethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2-Dichlorobenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,3-Dichlorobenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,4-Dichlorobenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Dichlorodifluoromethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,1-Dichloroethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,1-Dichloroethene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2-Dichloropropane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,3-Dichloropropane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
2,2-Dichloropropane	ND	20	D	µg/L	10	12/16/2021 2:10:57 PM	R84618

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112795**
Date Reported: **1/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-4
Project: Logos Julander Federal 1E
Collection Date: 12/9/2021 12:48:00 PM
Lab ID: 2112795-002 **Matrix:** AQUEOUS **Received Date:** 12/11/2021 9:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Hexachlorobutadiene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
2-Hexanone	ND	100	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Isopropylbenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
4-Isopropyltoluene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
4-Methyl-2-pentanone	ND	100	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Methylene Chloride	ND	30	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
n-Butylbenzene	ND	30	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
n-Propylbenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
sec-Butylbenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Styrene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
tert-Butylbenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,1,1,2-Tetrachloroethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,1,2,2-Tetrachloroethane	ND	20	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Tetrachloroethene (PCE)	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
trans-1,2-DCE	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
trans-1,3-Dichloropropene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2,3-Trichlorobenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2,4-Trichlorobenzene	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,1,1-Trichloroethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,1,2-Trichloroethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Trichloroethene (TCE)	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Trichlorofluoromethane	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
1,2,3-Trichloropropane	ND	20	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Vinyl chloride	ND	10	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Xylenes, Total	140	15	D	µg/L	10	12/16/2021 2:10:57 PM	R84618
Surr: 1,2-Dichloroethane-d4	94.2	70-130	D	%Rec	10	12/16/2021 2:10:57 PM	R84618
Surr: 4-Bromofluorobenzene	100	70-130	D	%Rec	10	12/16/2021 2:10:57 PM	R84618
Surr: Dibromofluoromethane	89.1	70-130	D	%Rec	10	12/16/2021 2:10:57 PM	R84618
Surr: Toluene-d8	98.4	70-130	D	%Rec	10	12/16/2021 2:10:57 PM	R84618

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112795**
Date Reported: **1/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Logos Julander Federal 1E
Collection Date: 12/9/2021 2:18:00 PM
Lab ID: 2112795-003 **Matrix:** AQUEOUS **Received Date:** 12/11/2021 9:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	6300	500	D	µg/L	500	12/16/2021 2:39:41 PM	R84618
Toluene	14000	500	D	µg/L	500	12/16/2021 2:39:41 PM	R84618
Ethylbenzene	950	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Methyl tert-butyl ether (MTBE)	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2,4-Trimethylbenzene	490	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,3,5-Trimethylbenzene	200	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2-Dichloroethane (EDC)	ND	20	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2-Dibromoethane (EDB)	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Naphthalene	ND	100	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1-Methylnaphthalene	ND	200	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
2-Methylnaphthalene	ND	200	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Acetone	ND	500	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Bromobenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Bromodichloromethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Bromoform	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Bromomethane	ND	150	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
2-Butanone	ND	500	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Carbon disulfide	ND	500	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Carbon Tetrachloride	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Chlorobenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Chloroethane	ND	100	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Chloroform	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Chloromethane	ND	150	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
2-Chlorotoluene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
4-Chlorotoluene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
cis-1,2-DCE	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
cis-1,3-Dichloropropene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2-Dibromo-3-chloropropane	ND	100	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Dibromochloromethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Dibromomethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2-Dichlorobenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,3-Dichlorobenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,4-Dichlorobenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Dichlorodifluoromethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,1-Dichloroethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,1-Dichloroethene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2-Dichloropropane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,3-Dichloropropane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
2,2-Dichloropropane	ND	100	D	µg/L	50	12/16/2021 3:08:25 PM	R84618

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112795**
Date Reported: **1/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: Logos Julander Federal 1E
Collection Date: 12/9/2021 2:18:00 PM
Lab ID: 2112795-003 **Matrix:** AQUEOUS **Received Date:** 12/11/2021 9:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Hexachlorobutadiene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
2-Hexanone	ND	500	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Isopropylbenzene	69	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
4-Isopropyltoluene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
4-Methyl-2-pentanone	ND	500	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Methylene Chloride	ND	150	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
n-Butylbenzene	ND	150	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
n-Propylbenzene	74	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
sec-Butylbenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Styrene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
tert-Butylbenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,1,1,2-Tetrachloroethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,1,2,2-Tetrachloroethane	ND	100	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Tetrachloroethene (PCE)	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
trans-1,2-DCE	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
trans-1,3-Dichloropropene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2,3-Trichlorobenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2,4-Trichlorobenzene	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,1,1-Trichloroethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,1,2-Trichloroethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Trichloroethene (TCE)	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Trichlorofluoromethane	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
1,2,3-Trichloropropane	ND	100	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Vinyl chloride	ND	50	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Xylenes, Total	9100	75	D	µg/L	50	12/16/2021 3:08:25 PM	R84618
Surr: 1,2-Dichloroethane-d4	92.9	70-130	D	%Rec	50	12/16/2021 3:08:25 PM	R84618
Surr: 4-Bromofluorobenzene	94.7	70-130	D	%Rec	50	12/16/2021 3:08:25 PM	R84618
Surr: Dibromofluoromethane	89.1	70-130	D	%Rec	50	12/16/2021 3:08:25 PM	R84618
Surr: Toluene-d8	98.6	70-130	D	%Rec	50	12/16/2021 3:08:25 PM	R84618

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112795**
Date Reported: **1/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: Logos Julander Federal 1E **Collection Date:**
Lab ID: 2112795-004 **Matrix:** TRIP BLANK **Received Date:** 12/11/2021 9:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Toluene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Ethylbenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Naphthalene	ND	2.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1-Methylnaphthalene	ND	4.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
2-Methylnaphthalene	ND	4.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Acetone	ND	10		µg/L	1	12/16/2021 3:37:10 PM	R84618
Bromobenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Bromodichloromethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Bromoform	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Bromomethane	ND	3.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
2-Butanone	ND	10		µg/L	1	12/16/2021 3:37:10 PM	R84618
Carbon disulfide	ND	10		µg/L	1	12/16/2021 3:37:10 PM	R84618
Carbon Tetrachloride	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Chlorobenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Chloroethane	ND	2.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Chloroform	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Chloromethane	ND	3.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
2-Chlorotoluene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
4-Chlorotoluene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
cis-1,2-DCE	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Dibromochloromethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Dibromomethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,1-Dichloroethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,1-Dichloroethene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2-Dichloropropane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,3-Dichloropropane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
2,2-Dichloropropane	ND	2.0		µg/L	1	12/16/2021 3:37:10 PM	R84618

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report
Lab Order **2112795**
Date Reported: **1/3/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: Logos Julander Federal 1E **Collection Date:**
Lab ID: 2112795-004 **Matrix:** TRIP BLANK **Received Date:** 12/11/2021 9:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Hexachlorobutadiene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
2-Hexanone	ND	10		µg/L	1	12/16/2021 3:37:10 PM	R84618
Isopropylbenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
4-Isopropyltoluene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
4-Methyl-2-pentanone	ND	10		µg/L	1	12/16/2021 3:37:10 PM	R84618
Methylene Chloride	ND	3.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
n-Butylbenzene	ND	3.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
n-Propylbenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
sec-Butylbenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Styrene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
tert-Butylbenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
trans-1,2-DCE	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Trichlorofluoromethane	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Vinyl chloride	ND	1.0		µg/L	1	12/16/2021 3:37:10 PM	R84618
Xylenes, Total	ND	1.5		µg/L	1	12/16/2021 3:37:10 PM	R84618
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	12/16/2021 3:37:10 PM	R84618
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	12/16/2021 3:37:10 PM	R84618
Surr: Dibromofluoromethane	102	70-130		%Rec	1	12/16/2021 3:37:10 PM	R84618
Surr: Toluene-d8	97.4	70-130		%Rec	1	12/16/2021 3:37:10 PM	R84618

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112795**
03-Jan-22

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R84618** RunNo: **84618**
Prep Date: Analysis Date: **12/16/2021** SeqNo: **2974583** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	111	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Chlorobenzene	21	1.0	20.00	0	105	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	107	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130			
Surr: Toluene-d8	9.9		10.00		98.7	70	130			

Sample ID: **2112795-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-3** Batch ID: **R84618** RunNo: **84618**
Prep Date: Analysis Date: **12/16/2021** SeqNo: **2974589** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	15000	200	4000	11520	97.5	70	130			
Toluene	15000	200	4000	11110	90.1	70	130			

Sample ID: **2112795-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-3** Batch ID: **R84618** RunNo: **84618**
Prep Date: Analysis Date: **12/16/2021** SeqNo: **2974590** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	15000	200	4000	11520	87.1	70	130	2.72	20	
Toluene	15000	200	4000	11110	86.5	70	130	0.983	20	

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R84618** RunNo: **84618**
Prep Date: Analysis Date: **12/16/2021** SeqNo: **2974608** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112795**
03-Jan-22

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84618**	RunNo: **84618**
Prep Date:	Analysis Date: **12/16/2021**	SeqNo: **2974608** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112795**
03-Jan-22

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84618**	RunNo: **84618**
Prep Date:	Analysis Date: **12/16/2021**	SeqNo: **2974608** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.9		10.00		99.4	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R84783**	RunNo: **84783**
Prep Date:	Analysis Date: **12/23/2021**	SeqNo: **2981836** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	92.6	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	92.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.1	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.4	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R84783**	RunNo: **84783**
Prep Date:	Analysis Date: **12/24/2021**	SeqNo: **2981837** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112795**
03-Jan-22

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R84783** RunNo: **84783**
Prep Date: Analysis Date: **12/24/2021** SeqNo: **2981837** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	93.5	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	93.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		97.0	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID: **2112795-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-3** Batch ID: **R84783** RunNo: **84783**
Prep Date: Analysis Date: **12/23/2021** SeqNo: **2981840** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	980	50	1000	0	97.6	70	130			
1,1-Dichloroethene	760	50	1000	0	76.2	70	130			
Trichloroethene (TCE)	760	50	1000	0	75.8	70	130			
Surr: 1,2-Dichloroethane-d4	420		500.0		84.8	70	130			
Surr: 4-Bromofluorobenzene	480		500.0		95.3	70	130			
Surr: Dibromofluoromethane	430		500.0		86.5	70	130			
Surr: Toluene-d8	510		500.0		102	70	130			

Sample ID: **2112795-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-3** Batch ID: **R84783** RunNo: **84783**
Prep Date: Analysis Date: **12/23/2021** SeqNo: **2981841** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	930	50	1000	0	93.1	70	130	4.78	20	
1,1-Dichloroethene	770	50	1000	0	76.7	70	130	0.573	20	
Trichloroethene (TCE)	770	50	1000	0	77.2	70	130	1.75	20	
Surr: 1,2-Dichloroethane-d4	450		500.0		89.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	480		500.0		95.9	70	130	0	0	
Surr: Dibromofluoromethane	440		500.0		88.8	70	130	0	0	
Surr: Toluene-d8	520		500.0		104	70	130	0	0	

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R84783** RunNo: **84783**
Prep Date: Analysis Date: **12/23/2021** SeqNo: **2981886** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112795**
03-Jan-22

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84783**	RunNo: **84783**
Prep Date:	Analysis Date: **12/23/2021**	SeqNo: **2981886** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112795**
03-Jan-22

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84783**	RunNo: **84783**
Prep Date:	Analysis Date: **12/23/2021**	SeqNo: **2981886** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.7	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.1	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.2	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84783**	RunNo: **84783**
Prep Date:	Analysis Date: **12/24/2021**	SeqNo: **2981887** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								

Qualifiers:

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D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112795**
03-Jan-22

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84783**	RunNo: **84783**
Prep Date:	Analysis Date: **12/24/2021**	SeqNo: **2981887** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112795**
03-Jan-22

Client: Animas Environmental Services
Project: Logos Julander Federal 1E

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**							
Client ID: **PBW**	Batch ID: **R84783**	RunNo: **84783**							
Prep Date:	Analysis Date: **12/24/2021**	SeqNo: **2981887**	Units: **µg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.8	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.0	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Qualifiers:

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D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix interference
B	Analyte detected in the associated Method Blank
E	Estimated value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Animas Environmental Services** Work Order Number: **2112795** RcptNo: **1**

Received By: **Juan Rojas** **12/11/2021 9:32:00 AM**

Completed By: **Desiree Dominguez** **12/13/2021 9:38:52 AM**

Reviewed By: TMe 12/13/21

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: CM 12/13/21

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good				

Chain-of-Custody Record

Client: Animas Environmental Services, LLC	X Standard Rush_____
	Project Name: Logos Julander Federal #1E
Mailing Address: P.O. Box 8 Farmington, NM 87499-0008	Project #:
Phone #: 505-564-2281	
email or Fax#: dreese@animasenvironmental.com	Project Manager: David Reese
QA/QC Package: X Standard ☐ Level 4 (Full Validation)	
Accreditation: ☐ NELAP ☐ Other_____ ☐ EDD (Type) _____	Sampler: JO On Ice: ☒ Yes ☐ No Sample Temperature: 4.9-0 = 4.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2112795	8260 Full List	Air Bubbles (Y or N)
12-09-21	15:14	H_2O	MW-3	3 - 40 ml VOA	HgCl2	-001	X	
12-09-21	12:48	H_2O	MW-4	3 - 40 ml VOA	HgCl2	-002	X	
12-09-21	14:18	H_2O	MW-9	3 - 40 ml VOA	HgCl2	-003	X	
		H2O	Trip Blank	2 - 40 mL VOA	HCl	-004	X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/10/21	1352			12/10/21	1352
12/11/21	932		CDO	12/11/21	9:32

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

District I
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 102380

CONDITIONS

Operator: LOGOS OPERATING, LLC 2010 Afton Place Farmington, NM 87401	OGRID: 289408
	Action Number: 102380
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	6/1/2022