See Variance Request and OCD Approval Letters at end of report.

March 5, 2022

Zach Stradling
Benson-Montin-Greer Drilling Corp.
4900 College Blvd.
Farmington, New Mexico 87402

Re: Q4 2021 and Final Groundwater Monitoring Report
O-9 Pipeline Release
NMOCD Order Number: AP-31
NMOCD Incident Number: NAUTOFWCO00437
Rio Arriba County, New Mexico

Dear Mr. Stradling:

Animas Environmental Services, LLC (AES) has prepared this report detailing Q4 2021 groundwater monitoring and sampling at the Benson-Montin-Greer Drilling Corporation (BMG) O-9 release location on December 7, 2021. A topographic site location map and an aerial site location map are included as Figures 1 and 2, respectively.

1.0 Site History

1.1 Initial Release and Investigation

Hydrocarbons were discovered in the vicinity of the O-9 pipeline in Santa Fe National Forest by BMG during the summer of 2000. BMG completed removal of approximately 2,800 cubic yards of hydrocarbon-impacted soils and backfilled the excavation with clean soil. The Canada Ojitos intermittent stream is shortly north of the site.

Philip Environmental Services Corporation (Philip) was contracted by BMG to perform a limited subsurface investigation of soil and groundwater from a crude oil pipeline spill. Ten soil borings were completed in August 2000 to assess environmental impacts from the O-9 Line Leak. Five of the borings were converted into monitoring wells (MW-1 through MW-5).

On September 20 and 21, 2001, AMEC Earth & Environmental, Inc. (AMEC) completed

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further site investigation activities. Seven soil borings were completed, of which three were converted into monitor wells (MW-6 through MW-8). August 2000 to October 2001 depth to groundwater measurements and water quality data are summarized and presented in Table 1, and laboratory analytical results are presented in Table 2.

1.2 Abatement Plan

BMG submitted a Stage 1 and Stage 2 abatement plan to New Mexico Oil Conservation Division (NMOCD) on November 28, 2001. Public notice requirements were completed by March 11, 2002. Further information required to complete the abatement plan was submitted to NMOCD on August 26, 2002.

1.3 Groundwater Monitoring and Sampling, April 2019 to Present

AES has completed quarterly groundwater monitoring and sampling at the location from April 2019 to present. Results have been submitted to NMOCD in quarterly reports.

1.4 Soil Boring and Monitor Well Installation, November 2020

AES installed three soil borings (SB-16 through SB-18) at the site to further delineate the dissolved phase contamination and confirm lateral extents of contaminant extents at the site in November 2020. Two of the borings were completed as 2-inch monitor wells (MW-9 and MW-10). Soil borings were drilled to approximately 25 feet below ground surface (ft bgs).

The observed lithology was comprised of mainly fine to medium grained sand from the surface down to approximately 14 ft bgs and very low plasticity clay from approximately 14 ft bgs to 25 ft bgs. Weathered sandstone was encountered in SB-17 and SB-18 at approximately 10 and 25 ft bgs, respectively. Evidence of groundwater was observed in SB-17/MW-9 at approximately 18 ft bgs but was not observed in SB-16 or SB-18/MW-10. Visual and olfactory observations did not indicate petroleum hydrocarbon contamination.

Soil samples were collected from 10 and 25 ft bgs in SB-16 and SB-18, and at 5 and 20 ft bgs in SB-17. Benzene, toluene, ethylbenzene, and xylenes (BTEX) and chlorides were not detected in any of the six soil samples that were collected. However, total petroleum hydrocarbons (TPH) (as gasoline-range organics [GRO], diesel-range organics [DRO], and motor oil-range organics [MRO]) was detected in the samples from SB-16 at 10 ft bgs (94 milligrams per kilogram [mg/kg]) and SB-18 at 10 ft bgs (350 mg/kg), which exceeds the

NMOCD action level of 100 mg/kg but is below the applicable TPH soil screening level (SSL) of 1,000 mg/kg as referenced in New Mexico Environment Department (NMED) *Volume I – Soil Screening Guidance for Human Health Risk Assessment (February 2019; Revision 2 June 2019)*. Note that in the sample collected in SB-18 at 25 ft bgs, TPH concentrations were below laboratory detection limits in all three ranges (GRO, DRO, and MRO).

2.0 Groundwater Monitoring and Sampling, December 2021

On December 7, 2021, AES conducted groundwater monitoring and sampling at the site. Ten monitor wells (MW-1 through MW-10) were gauged, and two monitor wells (MW-9 and MW-10) were purged and sampled. Monitor well MW-4 did not contain enough water to allow for purging or sampling.

Depth to groundwater was measured in each well at the site and used to calculate purge volumes. Wells were purged of approximately three well volumes or until nearly dry with new disposable bailers. Recharge rates at the site vary between very slow to steady production. The bailers were lowered slowly and carefully into the wells to minimize turbidity. After completing purging, samples were collected with new disposable bailers and transferred into 40-mL vials, which were labeled and stored on ice at less than 6°C in a cooler until delivered to Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. Groundwater samples were analyzed for full list volatile organics (VOCs) per U.S. Environmental Protection Agency (USEPA) Method 8260 as well as TPH as GRO/DRO/MRO per USEPA Method 8015.

2.1 Groundwater Measurement and Water Quality Data

On December 7, 2021, groundwater elevations had decreased by an average of approximately 0.38 ft since the August 2021 sampling event. Groundwater elevations ranged between 7,433.22 ft above mean sea level (AMSL) in MW-8 and 7,441.56 ft AMSL in MW-4. MW-2, MW-4, MW-5, and MW-7 were observed to have insufficient water to obtain water quality measurements. Shallow groundwater was observed to flow to the east-southeast, with an approximate gradient of 0.01 ft/ft. Depth to groundwater measurements and water quality data are summarized in Table 1, and a groundwater elevation contour map is included as Figure 3. Groundwater sample collection forms are attached.

2.2 Groundwater Analytical Results

In December 2021, dissolved phase BTEX and TPH concentrations were reported below their respective laboratory detection limits and New Mexico Water Quality Control Commission (WQCC) standards at each well sampled. Laboratory analytical results are included on Table 2, and contaminant concentrations are presented on Figure 4. The laboratory analytical report is included as an attachment.

3.0 Discussion

Groundwater contaminant concentrations in December 2021 were all below WQCC standards for BTEX, other volatile organic compounds (VOCs), and TPH. Additionally, dissolved phase VOC and TPH concentrations, soil concentrations from November 2020, and site lithology indicate that the soil-to-groundwater pathway will likely continue to have stable to decreasing VOC and TPH groundwater concentrations with soil concentrations remaining below NMED soil screening levels.

Dissolved phase VOC concentrations in MW-1 through MW-3 and MW-5 through MW-8 had previously been below WQCC standards for eight consecutive events. Monitor well MW-4 did not contain sufficient volume of water to be sampled.

The site should be considered for No Further Action (NFA) status based on the following factors:

- Groundwater concentrations at wells MW-1 through MW-3 and MW-5 through MW-8 have been below state WQCC standards listed at NMAC 20.6.2.3103 for eight or more consecutive quarters.

- Monitor wells MW-4, MW-9, and MW-10 have been sampled for four to five events. All applicable VOC and TPH sample results have been below laboratory detection limits at these wells since they were installed. These wells appear to be appropriate for a variance per NMAC 20.6.2.1210.

- Soil concentrations from November 2020 and site lithology indicate, together with dissolved phase concentrations, that the soil-to-groundwater pathway will likely continue to have stable to decreasing VOC and TPH groundwater concentrations, with VOC and TPH soil concentrations remaining below NMED soil screening levels

(Volume I – Soil Screening Guidance for Human Health Risk Assessment, February 2019; Revision 2 June 2019) and NMOCD action levels (NMAC 19.15.29.12E).

- No sensitive receptors (schools, nursing homes, etc.) or registered domestic water wells are located in close proximity to the site. The site is on rural U.S. Forest Service land approximately 15 miles north of the nearest settlement of Lindrith, New Mexico, and no potentially complete exposure pathways have been identified.

4.0 Conclusions and Recommendations

AES completed quarterly groundwater monitoring and sampling at the site on December 7, 2021. Depth to water was gauged in monitor wells MW-1 through MW-10, but MW-2, MW-4, MW-5, and MW-7 were nearly dry and unable to be sampled. Groundwater samples were collected from monitor wells MW-9 and MW-10 for VOCs and TPH (GRO/DRO/MRO) analysis. These results show concentrations continue to remain below laboratory detection limits.

Based on discussion above, AES on behalf of BMG requests the site be evaluated for NFA status and the monitor wells be plugged and abandoned.

If you have any questions about this report, site conditions, or the scheduled work, please feel free to contact Angela Ledgerwood at (720) 537-6650 or Elizabeth McNally at (505) 564-2281.

Respectfully Submitted,

David Reese
Environmental Scientist

Angela Ledgerwood
Senior Project Manager

Elizabeth McNally, P.E.

Tables

1. Groundwater Measurements and Water Quality Data
2. Groundwater Laboratory Analytical Results
3. Soil Analytical Results, November 2020

Figures

1. Topographic Site Location Map
2. Aerial Site Map
3. Groundwater Elevations and Contours, December 2021
4. Groundwater Contaminant Concentrations, December 2021

Attachments

A. Water Sample Collection Forms (December 2021)
B. Laboratory Analytical Report (Hall No. 2112602)

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Cuba, NM 87013

https://bmgprojectsnon-spcc/Shared Documents/O-9 Release/Reports and Workplans/2022.03.05 BMG O-9 Line Leak 4th Qtr 2021 GW Monitoring Report.docx

Tables

TABLE 1
GROUNDWATER ELEVATIONS AND WATER QUALITY MEASUREMENTS
BMG Ojito Canyon (O-9) Release
Rio Arriba County, New Mexico

Well ID	Date Measured	TOC Elevation* (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thick-ness (ft)	Water Level Elevation (ft amsl)	Correct-ed GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-1	30-Aug-00	7507.22		16.69		7490.53		16.9	NM	NM	NM	NM
MW-1	06-Feb-01	7507.22		16.08		7491.14		7.6	0.862	NM	5.54	NM
MW-1	05-Oct-01	7507.22		16.15		7491.07		NM	NM	NM	NM	NM
MW-1	03-Apr-19	7507.22		16.74		7490.48		8.3	493.0	2.23	7.32	107.1
MW-1	16-Aug-19	7507.22		18.54		7488.68		10.1	0.77	2.22	7.52	70.6
MW-1	23-Dec-19	7507.22		20.56		7486.66		9.96	0.803	2.66	7.28	119.2
MW-1	24-Mar-20	7507.22		18.91		7488.31		8.5	0.707	3.54	7.14	136.4
MW-1	18-Jun-20	7507.22		19.98		7487.24		8.9	0.72	3.94	7.17	179.8
MW-1	16-Sep-20	7457.88		22.05		7435.83		NM	NM	NM	NM	NM
MW-1	19-Nov-20	7457.88		22.41		7435.47		NM	NM	NM	NM	NM
MW-1	24-Feb-21	7457.88		21.70		7436.18		NM - Gauge Only				
MW-1	25-May-21	7457.88		20.22		7437.66		9.8	0.502	3.26	7.42	260.5
MW-1	30-Aug-21	7457.88		22.36		7435.52		12.0	0.535	1.36	7.21	63.7
MW-1	07-Dec-21	7457.88		23.00		7434.88		9.6	0.563	4.8	7.1	39.0
MW-2	30-Aug-00	7506.50		16.62		7489.88		15.2	NM	NM	NM	NM
MW-2	06-Feb-01	7506.50		15.91		7490.59		9.48	1.06	NM	5.9	NM
MW-2	05-Oct-01	7506.50		15.94		7490.56		NA	0.463	6.44	NM	226.7
MW-2	03-Apr-19	7506.50		16.30		7490.20		7.9	448.3	7.02	7.49	72.2
MW-2	16-Aug-19	7506.50		17.81		7488.69		10.8	0.84	1.47	7.40	-67.0
MW-2	23-Dec-19	7506.50		20.41		7486.09		10.16	1.035	2.25	7.13	-67.8
MW-2	24-Mar-20	7506.50		19.12		7487.38		8.5	0.830	3.02	6.97	5.3
MW-2	18-Jun-20	7506.50		19.87		7486.63		10.0	0.82	1.51	6.99	79.5
MW-2	16-Sep-20	7457.24		21.57		7435.67		NM	NM	NM	NM	NM
MW-2	19-Nov-20	7457.24		21.75		7435.49		NM	NM	NM	NM	NM
MW-2	24-Feb-21	7457.24		21.78		7435.46		NM - Gauge Only				
MW-2	25-May-21	7457.24		19.94		7437.30		9.2	0.296	5.85	7.34	259.5
MW-2	30-Aug-21	7457.24		21.71		7435.53		NM - Insufficient Water				
MW-2	07-Dec-21	7457.24		22.02		7435.22		NM - Insufficient Water				

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BMG Ojito Canyon (O-9) Release
Rio Arriba County, New Mexico

Well ID	Date Measured	TOC Elevation* (ft amsl)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thick-ness (ft)	Water Level Elevation (ft amsl)	Correct-ed GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-3	30-Aug-00	7508.63		17.21		7491.42		14.3	NM	NM	NM	NM
MW-3	06-Feb-01	7508.63		16.88		7491.75		9.3	84.6	NM	4.97	NM
MW-3	05-Oct-01	7508.63		17.01		7491.62		NM	NM	NM	NM	NM
MW-3	03-Apr-19	7508.63		17.83		7490.80		8.6	446.3	1.55	7.25	134.9
MW-3	16-Aug-19	7508.63		20.69		7487.94		10.6	0.672	1.67	7.52	158.1
MW-3	23-Dec-19	7508.63		21.46		7487.17		9.75	0.729	2.18	7.34	156.7
MW-3	24-Mar-20	7508.63		19.72		7488.91		8.8	0.655	0.98	7.01	158.5
MW-3	18-Jun-20	7508.63		21.42		7487.21		8.9	0.658	1.56	7.04	174.6
MW-3	16-Sep-20	7460.72		22.90		7437.82		NM	NM	NM	NM	NM
MW-3	19-Nov-20	7460.72		22.74		7437.98		NM	NM	NM	NM	NM
MW-3	24-Feb-20	7460.72		22.04		7438.68		NM - Gauge Only				
MW-3	25-May-21	7460.72		21.26		7439.46		9.6	0.480	2.26	7.89	277.6
MW-3	30-Aug-21	7460.72		23.23		7437.49		12.3	0.516	0.81	7.28	204.5
MW-3	07-Dec-21	7460.72		23.06		7437.66		9.7	0.519	6.7	6.8	211.5
MW-4	30-Aug-00	7507.10		15.51		7491.59		14.9	NM	NM	NM	NM
MW-4	06-Feb-01	7507.10		15.05		7492.05		7.02	0.77	NM	5.15	NM
MW-4	05-Oct-01	7507.10		15.14		7491.96		NM	NM	NM	NM	NM
MW-4	03-Apr-19	7507.10		14.62		7492.48		4.6	237.3	6.74	7.44	108.9
MW-4	16-Aug-19	7507.10		16.79		7490.31		NM - Insufficient Water				
MW-4	23-Dec-19	7507.10		16.97		7490.13		NM - Insufficient Water				
MW-4	24-Mar-20	7507.10		16.92		7490.18		NM - Insufficient Water				
MW-4	18-Jun-20	7507.10		16.80		7490.30		NM - Insufficient Water				
MW-4	16-Sep-20	7458.66		16.82		7441.84		NM - Insufficient Water				
MW-4	19-Nov-20	7458.66		17.04		7441.62		NM - Insufficient Water				
MW-4	24-Feb-21	7458.66		17.04		7441.62		NM - Insufficient Water				
MW-4	25-May-21	7458.66		17.05		7441.61		NM - Insufficient Water				
MW-4	30-Aug-21	7458.66		17.10		7441.56		NM - Insufficient Water				

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MW-4	07-Dec-21	7458.66		17.10		7441.56		NM - Insufficient Water				
MW-5	30-Aug-00	7503.22		16.66		7486.56		12.6	NM	NM	NM	NM
MW-5	06-Feb-01	7503.22	16.23	17.41	1.18	7485.81	7486.73	NM - NAPL PRESENT				
MW-5	05-Oct-01	7503.22	16.26	16.74	0.48	7486.48	7486.85	NM - NAPL PRESENT				
MW-5	03-Apr-19	7503.22	16.92	16.93	0.01	7486.29	7486.30	NM - NAPL SHEEN PRESENT				
MW-5	16-Aug-19	7503.22	17.74	17.74	0.00	7485.48		NM - NAPL SHEEN PRESENT				
MW-5	23-Dec-19	7503.22	19.25	19.25	0.00	7483.97		NM - NAPL SHEEN PRESENT				
MW-5	24-Mar-20	7503.22	17.83	17.83	0.00	7485.39		NM - NAPL SHEEN PRESENT				
MW-5	18-Jun-20	7503.22	18.40	18.40	0.00	7484.82		NM - NAPL SHEEN PRESENT				
MW-5	16-Sep-20	7456.42	20.13	20.13	0.00	7436.29		NM - NAPL SHEEN PRESENT				
MW-5	19-Nov-20	7456.42		20.74		7435.68		NM - Insufficient Water				
MW-5	24-Feb-21	7456.42		21.21		7435.21		NM - Insufficient Water				
MW-5	25-May-21	7456.42		19.58		7436.84		9.4	0.635	2.01	7.42	113.5
MW-5	30-Aug-21	7456.42		20.32		7436.10		14.9	0.773	0.97	7.20	-22.4
MW-5	07-Dec-21	7456.42		21.22		7435.20		NM - Insufficient Water				
MW-6	05-Oct-01	NS		15.81				NA	0.544	3.29	NM	213.9
MW-6	03-Apr-19	NS		16.04				7.3	209.5	8.09	7.63	140.5
MW-6	16-Aug-19	NS		17.02				10.6	0.618	6.22	7.61	125.7
MW-6	23-Dec-19	NS		18.28				9.32	0.719	1.77	7.22	48.6
MW-6	24-Mar-20	NS		17.21				7.8	0.437	6.14	7.40	154.2
MW-6	18-Jun-20	NS		17.77				9.0	0.580	2.50	7.30	130.2
MW-6	16-Sep-20	7454.18		19.09		7435.09		11.1	0.484	1.98	7.19	149.7
MW-6	19-Nov-20	7454.18		19.47		7434.71		11.3	0.509	2.18	6.82	149.0
MW-6	24-Feb-21	7454.18		19.59		7434.59		8.3	0.493	2.99	7.56	205.5
MW-6	25-May-21	7454.18		18.52		7435.66		8.3	0.360	4.38	7.45	280.1
MW-6	30-Aug-21	7454.18		19.66		7434.52		11.0	0.498	0.65	7.34	74.6
MW-6	07-Dec-21	7454.18		20.24		7433.94		10.1	0.557	1.21	7.0	11.6

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MW-7	05-Oct-01	NS		16.00				NA	0.547	3.10	NM	-65.9
MW-7	03-Apr-19	NS	16.67	16.68	0.01			NM - NAPL SHEEN PRESENT				
MW-7	16-Aug-19	NS		17.45				NM - NAPL SHEEN PRESENT				
MW-7	23-Dec-19	NS		18.93				NM - NAPL SHEEN PRESENT				
MW-7	24-Mar-20	NS	17.62	17.62	0.00			7.7	1.02	4.52	7.11	112.1
MW-7	18-Jun-20	NS		18.17				NM - NAPL SHEEN PRESENT				
MW-7	16-Sep-20	7455.96		19.16		7436.80		NM - NAPL SHEEN PRESENT				
MW-7	19-Nov-20	7455.96		21.17		7434.79		NM - NAPL SHEEN PRESENT				
MW-7	24-Feb-21	7455.96		20.48		7435.48		8.0	0.668	5.25	7.23	128.9
MW-7	25-May-21	7455.96		19.69		7436.27		9.5	0.704	4.22	7.40	273.8
MW-7	30-Aug-21	7455.96		19.65		7436.31		11.5	0.726	1.03	7.42	-16.5
MW-7	07-Dec-21	7455.96		20.51		7435.45		NM - Insufficient Water				
MW-8	05-Oct-01	NS		14.06				NM	NM	NM	NM	NM
MW-8	03-Apr-19	NS		14.69				8.8	485.7	4.19	7.36	130.6
MW-8	16-Aug-19	NS		16.71				11.2	0.72	1.44	6.08	85.3
MW-8	23-Dec-19	NS		17.47				10.41	0.798	1.89	7.13	-57.4
MW-8	24-Mar-20	NS		16.38				9.4	0.720	1.59	7.11	-49.8
MW-8	18-Jun-20	NS		17.45				10.2	0.70	1.58	7.18	-15.4
MW-8	16-Sep-20	7452.31		18.67		7433.64		11.6	0.545	1.60	6.97	-19.1
MW-8	19-Nov-20	7452.31		18.60		7433.71		11.4	0.544	1.45	6.78	-30.9
MW-8	24-Feb-21	7452.31		18.08		7434.23		NM - Gauge Only				
MW-8	25-May-21	7452.31		17.46		7434.85		10.0	0.517	4.11	7.67	288.7
MW-8	30-Aug-21	7452.31		19.13		7433.18		11.6	0.531	0.95	7.36	34.0
MW-8	07-Dec-21	7452.31		19.09		7433.22		11.1	0.576	1.15	7.0	-42.2
MW-9	19-Nov-20	7458.38		22.84		7435.54		9.2	0.485	5.24	7.07	184.4
MW-9	24-Feb-21	7458.38		23.16		7435.22		6.6	0.462	4.40	7.01	197.4

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MW-9	25-May-21	7458.38		20.53		7437.85		7.9	0.475	4.11	7.38	267.5
MW-9	30-Aug-21	7458.38		22.25		7436.13		9.3	0.471	3.64	7.66	106.6
MW-9	07-Dec-21	7458.38		23.37		7435.01		8.3	0.504	3.3	7.2	48.2
MW-10	19-Nov-20	7453.59		27.12		7426.47		NM - Insufficient Water				
MW-10	24-Feb-21	7453.59		23.05		7430.54		7.4	283.7	4.01	7.10	44.7
MW-10	25-May-21	7453.59		21.34		7432.25		8.5	0.279	2.51	7.61	191.8
MW-10	30-Aug-21	7453.59		20.09		7433.50		9.4	0.295	1.68	7.91	8.3
MW-10	07-Dec-21	7453.59		19.71		7433.88		8.3	0.350	1.8	7.5	88.1

NOTES: NA NOT AVAILABLE
NM NOT MEASURED
NS NOT SURVEYED
TOC TOP OF CASING
*September 2020 TOCs were measured at MW-1 through MW-10 using UAS/drone mapping and were not professionally surveyed.

TABLE 2
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
BMG Ojito Canyon (O-9) Release
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO	MRO
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)
Analytical Method		8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8015B/ 8015D	8015B/ 8015M/D	8015B/ 8015M/D
NM WQCC STANDARD		*5*	*1,000*	*700*	*620*	*NE*	*NE*	*NE*
MW-1	30-Aug-00	<0.5	<0.5	<0.5	<0.5	<2.0	<1.0	<1.0
MW-1	06-Feb-01	<0.5	<0.5	<0.5	<0.5	<2.0	<1.0	<1.0
MW-1	25-Sep-01	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MW-1	03-Apr-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-1	16-Aug-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	23-Dec-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA
MW-1	24-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-1	18-Jun-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA
MW-2	30-Aug-00	<0.5	<0.5	<0.5	2.1	<2.0	<1.0	<1.0
MW-2	06-Feb-01	<0.5	<0.5	<0.5	<0.5	<2.0	<1.0	<1.0
MW-2	05-Oct-01	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MW-2	03-Apr-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-2	16-Aug-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	23-Dec-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA
MW-2	24-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-2	18-Jun-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA
MW-3	30-Aug-00	<0.5	<0.5	<0.5	<0.5	<2.0	<1.0	<1.0
MW-3	06-Feb-01	<0.5	<0.5	<0.5	<0.5	<2.0	<1.0	<1.0
MW-3	25-Sep-01	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MW-3	03-Apr-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-3	16-Aug-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	23-Dec-19	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	NA
MW-3	24-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-3	18-Jun-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA
MW-4	30-Aug-00	<0.5	<0.5	<0.5	<0.5	<2.0	<1.0	<1.0
MW-4	06-Feb-01	<0.5	<0.5	<0.5	<0.5	<2.0	<1.0	<1.0
MW-4	25-Sep-01	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MW-4	03-Apr-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-5	30-Aug-00	**400**	56	79	260	<2.0	1.6	<1.0
MW-5	03-Apr-19	<2.0	<2.0	<2.0	5.7	2.6	13	NA
MW-5	16-Aug-19	<1.0	<1.0	2.3	13	3.0	20	5.4
MW-5	23-Dec-19	<5.0	<5.0	10	64	12	1,100	NA
MW-5	24-Mar-20	<2.0	<2.0	<2.0	<3.0	1.2	1.6	NA
MW-5	18-Jun-20	<1.0	<1.0	<1.0	<2.0	1.6	15	<5.0
MW-5	16-Sep-20	<1.0	<1.0	<1.0	<1.5	0.34	4.5	NA
MW-5	25-May-21	<1.0	<1.0	<1.0	<1.5	0.64	2.7	<5.0

TABLE 2
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS
BMG Ojito Canyon (O-9) Release
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO	MRO
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)
Analytical Method		8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8021B/ 8260B	8015B/ 8015D	8015B/ 8015M/D	8015B/ 8015M/D
NM WQCC STANDARD		*5*	*1,000*	*700*	*620*	*NE*	*NE*	*NE*
MW-5	30-Aug-21	<2.0	<2.0	<2.0	<3.0	0.20	2.0	<5.0
MW-6	05-Oct-01	**69**	<0.5	23	41	NA	NA	NA
MW-6	03-Apr-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-6	16-Aug-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	23-Dec-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA
MW-6	24-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-6	18-Jun-20	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	NA
MW-6	16-Sep-20	<1.0	<1.0	<1.0	<1.5	<0.10	<1.0	NA
MW-6	19-Nov-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-6	24-Feb-21	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-7	05-Oct-01	**350**	47	87	310	NA	NA	NA
MW-7	03-Apr-19	<1.0	<1.0	<1.0	<1.5	<0.050	6.1	NA
MW-7	16-Aug-19	<1.0	<1.0	<1.0	<2.0	<0.050	8.1	<5.0
MW-7	23-Dec-19	<2.0	<2.0	<2.0	<4.0	<0.10	4.2	NA
MW-7	24-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-7	18-Jun-20	<1.0	<1.0	<1.0	<2.0	<0.050	6.7	<5.0
MW-7	16-Sep-20	<1.0	<1.0	<1.0	<1.5	0.078	5.7	NA
MW-7	19-Nov-20	<1.0	<1.0	<1.0	<1.5	0.054	3.4	<5.0
MW-7	24-Feb-21	<1.0	<1.0	<1.0	<1.5	0.058	2.9	<5.0
MW-8	25-Sep-01	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MW-8	03-Apr-19	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-8	16-Aug-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	23-Dec-19	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA
MW-8	24-Mar-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-8	18-Jun-20	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	NA
MW-8	16-Sep-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	NA
MW-8	19-Nov-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-9	19-Nov-20	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-9	24-Feb-21	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-9	25-May-21	<1.0	<1.0	<1.0	<1.5	<0.050	1.1	<5.0
MW-9	30-Aug-21	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-9	07-Dec-21	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-10	24-Feb-21	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-10	25-May-21	<1.0	<1.0	<1.0	<1.5	<0.050	1.0	<5.0
MW-10	30-Aug-21	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0

TABLE 2

CUMULATIVE GROUNDWATER ANALYTICAL RESULTS

BMG Ojito Canyon (O-9) Release

Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	GRO	DRO	MRO
		(µg/L)	*(µg/L)*	*(µg/L)*	*(µg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*
Analytical Method		**8021B/ 8260B**	**8021B/ 8260B**	**8021B/ 8260B**	**8021B/ 8260B**	**8015B/ 8015D**	**8015B/ 8015M/D**	**8015B/ 8015M/D**
NM WQCC STANDARD		***5***	***1,000***	***700***	***620***	***NE***	***NE***	***NE***
MW-10	07-Dec-21	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0

NOTES: NA = Not Analyzed
NE = Not Established
NS = Not Sampled
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
MRO = Motor Oil Range Organics

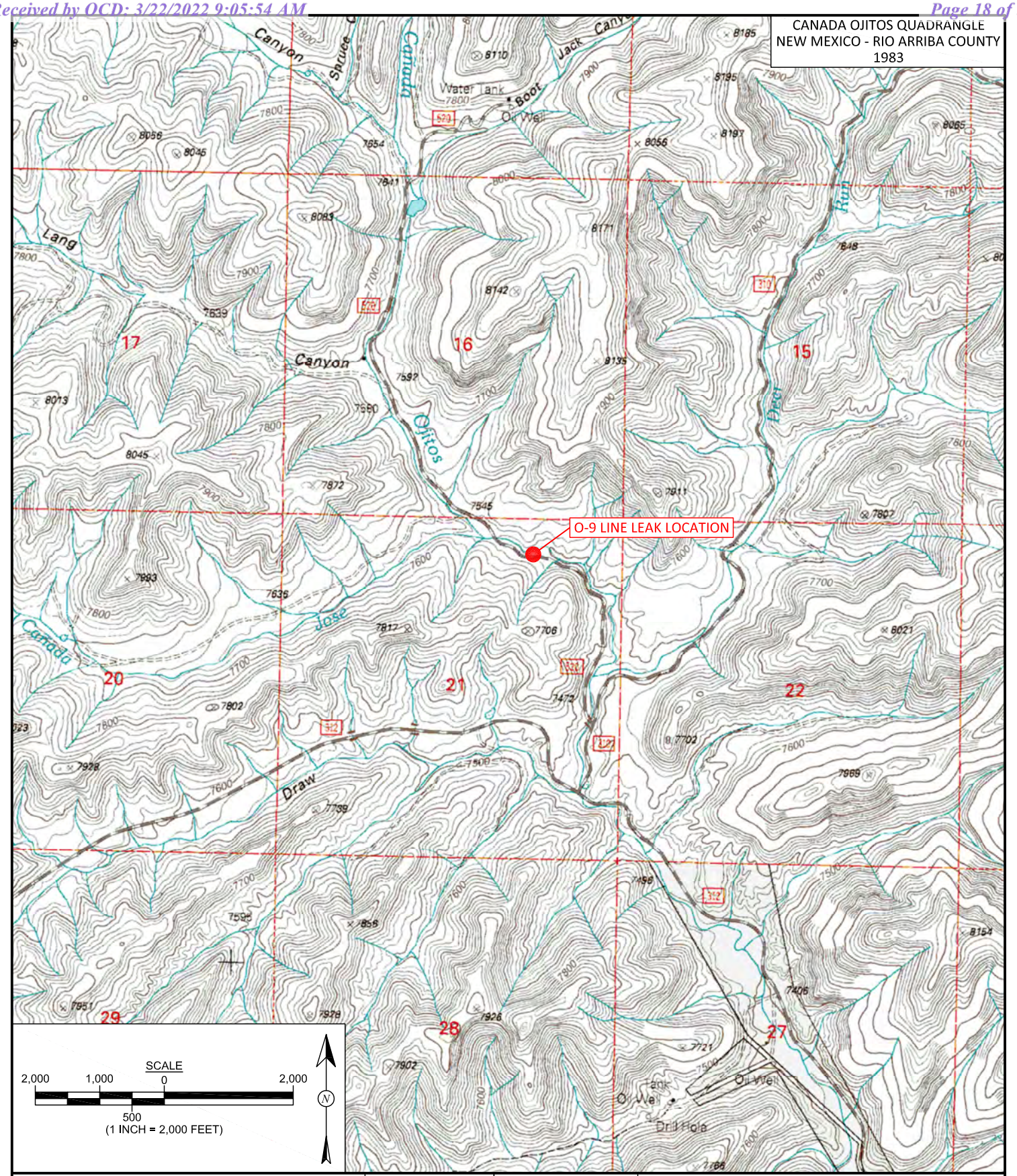
TABLE 3
CUMULATIVE SOIL ANALYTICAL RESULTS
BMG Ojito Canyon (O-9) Release
Rio Arriba County, New Mexico

Sample ID	Sample Date	Depth of Sample (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	TPH-GRO C6-C10 (mg/kg)	TPH-DRO C10-C28 (mg/kg)	TPH-MRO C28-C36 (mg/kg)	Chloride (mg/kg)
NMED SSLs Leaching to GW*			***0.0418***	***12.1***	***12.3***	***154***	***1,000***			***NE***
NMOCD Action Level*			***10 mg/kg Benzene (50 mg/kg BTEX)***				***100***			***600***
SB-16 @ 10'	4-Nov-20	10	<0.024	<0.048	<0.048	<0.097	<4.8	17	77	<59
SB-16 @ 25'	4-Nov-20	25	<0.025	<0.049	<0.049	<0.099	<4.9	<9.5	<48	<60
SB-17/MW-9 @ 5'	4-Nov-20	5	<0.025	<0.049	<0.049	<0.098	<4.9	<9.8	<49	<60
SB-17/MW-9 @ 20'	4-Nov-20	20	<0.025	<0.049	<0.049	<0.098	<4.9	<8.7	<43	<60
SB-18/MW-10 @ 10'	4-Nov-20	10	<0.12	<0.23	<0.23	<0.46	<23	180	170	<60
SB-18/MW-10 @ 25'	4-Nov-20	25	<0.024	<0.048	<0.048	<0.096	<4.8	<9.4	<47	<60

Notes:
< Analyte not detected above listed method limit
NA Not Analyzed
NE Not Established

Laboratory Analytical Methods: 8260 and 8015
*NMED SSL source: NMSSLs Table A-1 (June 2019 Revised) DAF 20, found in Volume I – Soil Screening Guidance for Human Health Risk Assessment (February 2019; Revision 2 June 2019). TPH analytical results included per NMAC 20.5.119.1914 and based on Table 6-2 TPH Soil Screening Levels.
(Unknown Oil - Residential Exposure)
**NMAC 19.15.29.12E Table I

Figures



DRAWN BY: C. Lameman	**DATE DRAWN:** June 3, 2019	**FIGURE 1**
REVISIONS BY: C. Lameman	**DATE REVISED:** March 1, 2022	**TOPOGRAPHIC SITE LOCATION MAP** BENSON-MONTIN-GREER O-9 LINE LEAK LOCATION N½ OF NE¼, SECTION 21, T26N, R1W RIO ARRIBA COUNTY, NEW MEXICO
CHECKED BY: L. Cupps	**DATE CHECKED:** March 1, 2022	
APPROVED BY: E. McNally	**DATE APPROVED:** March 1, 2022	

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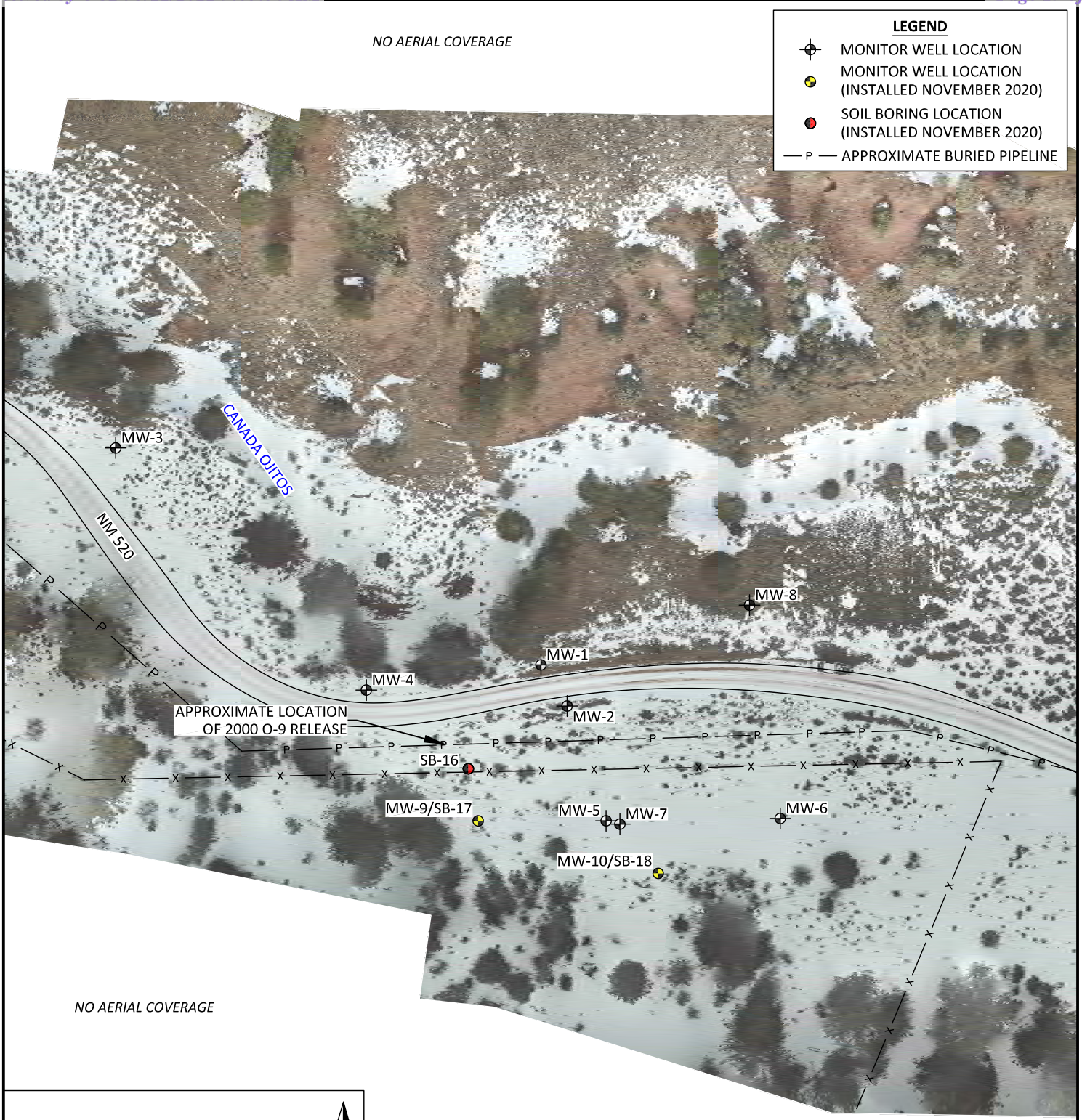

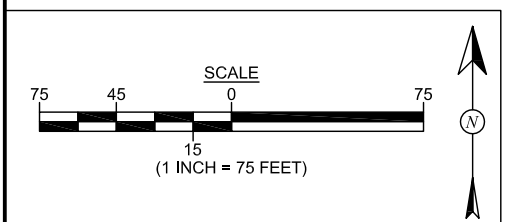

AERIAL SOURCE: © HIGH-ELEVATION AERIAL IMAGING AND ANIMAS ENVIRONMENTAL SERVICES, LLC.

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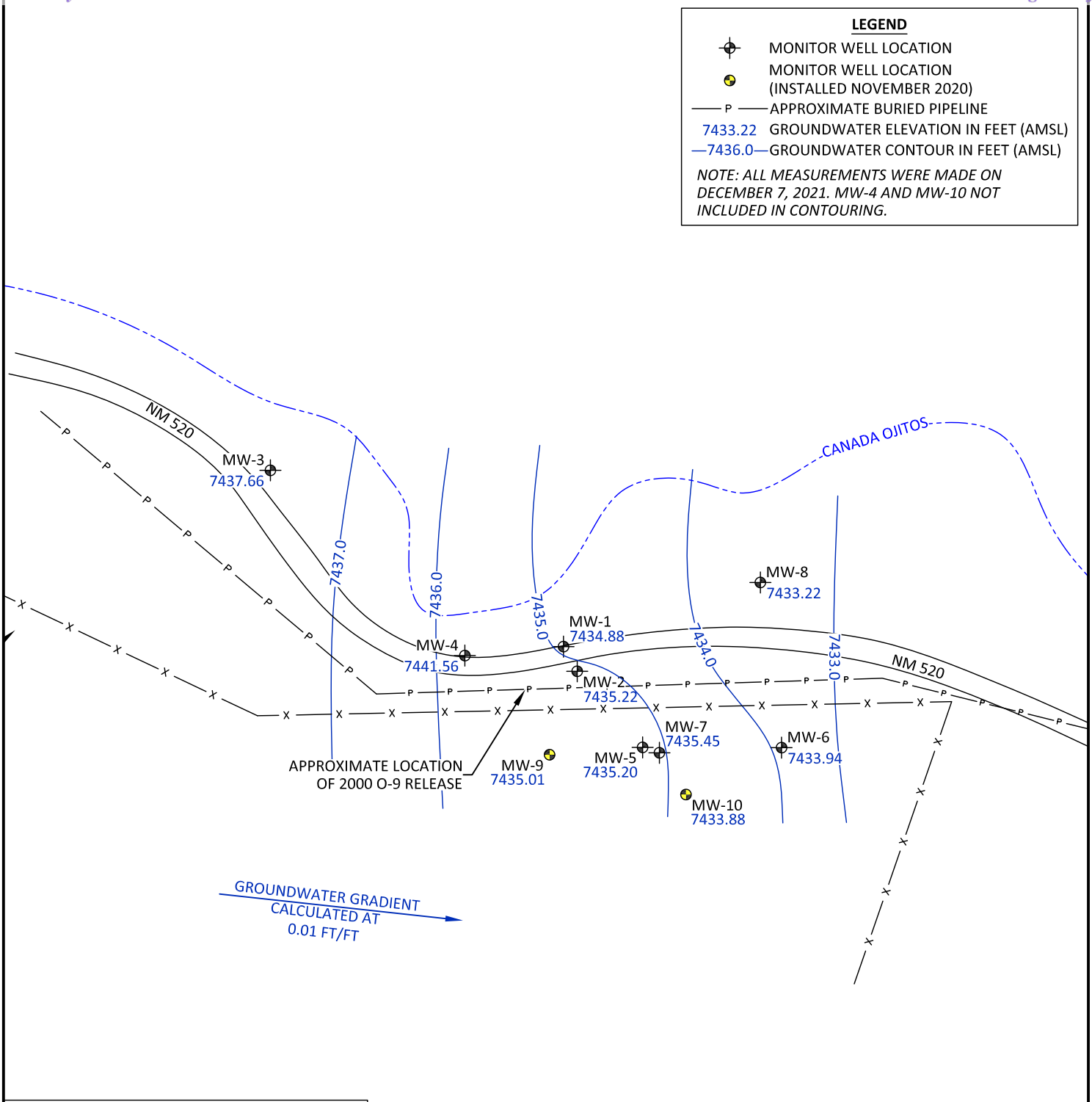
DRAWN BY: C. Lameman	**DATE DRAWN:** June 3, 2019
REVISIONS BY: C. Lameman	**DATE REVISED:** March 1, 2022
CHECKED BY: L. Cupps	**DATE CHECKED:** March 1, 2022
APPROVED BY: E. McNally	**DATE APPROVED:** March 1, 2022

FIGURE 2

AERIAL SITE LOCATION MAP AND MONITOR WELL LOCATIONS
BENSON-MONTIN-GREER
O-9 LINE LEAK LOCATION
N½ OF NE¼, SECTION 21, T26N, R1W
RIO ARRIBA COUNTY, NEW MEXICO



DRAWN BY: C. Lameman	**DATE DRAWN:** June 3, 2019	**FIGURE 3**
REVISIONS BY: C. Lameman	**DATE REVISED:** March 1, 2022	**GROUNDWATER ELEVATION CONTOURS DECEMBER 2021** BENSON-MONTIN-GREER O-9 LINE LEAK LOCATION N½ OF NE¼, SECTION 21, T26N, R1W RIO ARRIBA COUNTY, NEW MEXICO
CHECKED BY: L. Cupps	**DATE CHECKED:** March 1, 2022	
APPROVED BY: E. McNally	**DATE APPROVED:** March 1, 2022	

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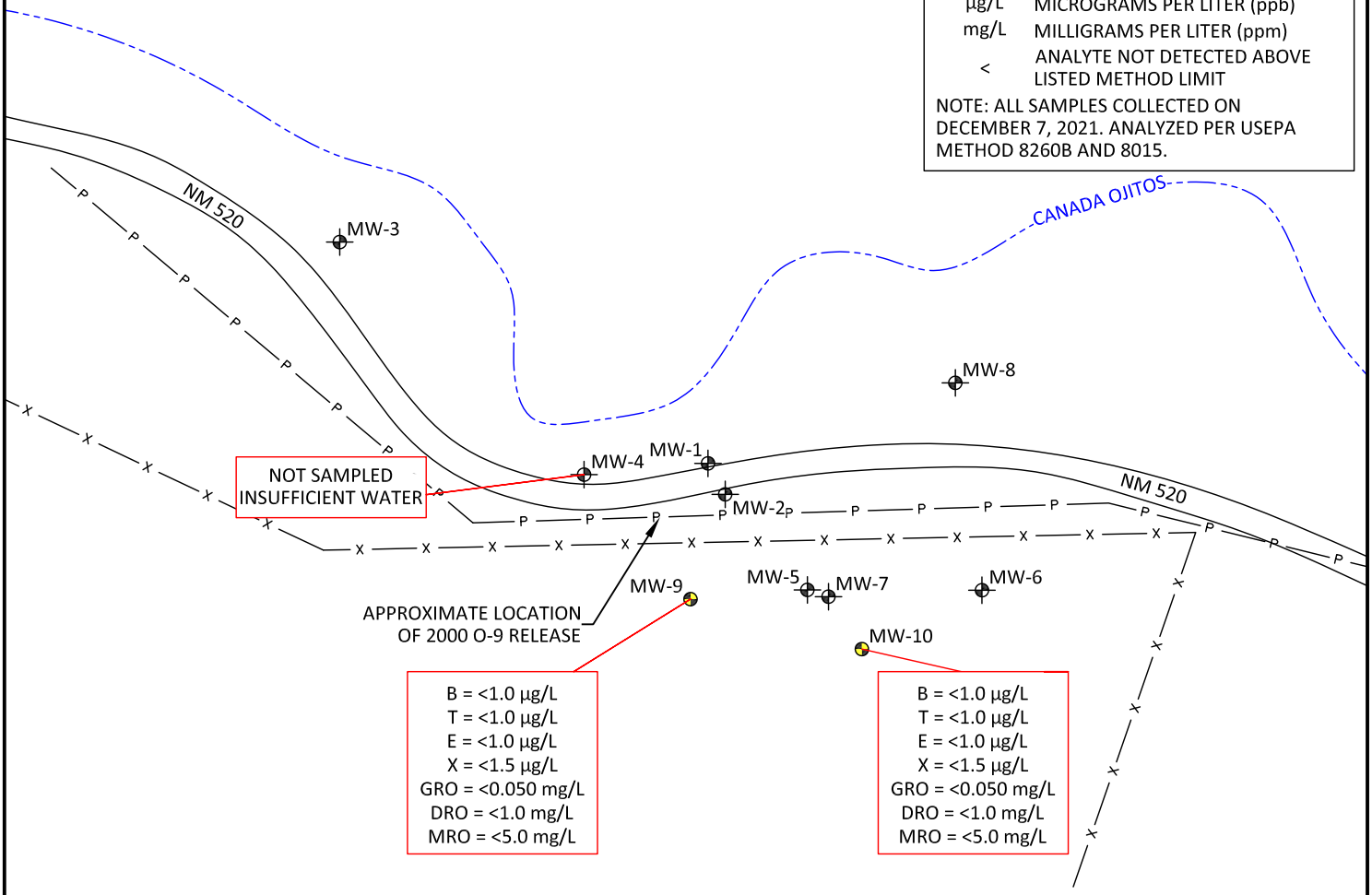
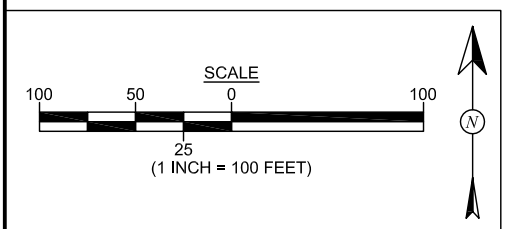
LEGEND

⊕	MONITOR WELL LOCATION
⊕	MONITOR WELL LOCATION (INSTALLED NOVEMBER 2020)
—— P ——	APPROXIMATE BURIED PIPELINE
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES, TOTAL
GRO	GASOLINE RANGE ORGANICS
DRO	DIESEL RANGE ORGANICS
MRO	MOTOR OIL RANGE ORGANICS
µg/L	MICROGRAMS PER LITER (ppb)
mg/L	MILLIGRAMS PER LITER (ppm)
<	ANALYTE NOT DETECTED ABOVE LISTED METHOD LIMIT

NOTE: ALL SAMPLES COLLECTED ON DECEMBER 7, 2021. ANALYZED PER USEPA METHOD 8260B AND 8015.





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DRAWN BY: C. Lameman	**DATE DRAWN:** June 3, 2019
REVISIONS BY: C. Lameman	**DATE REVISED:** March 1, 2022
CHECKED BY: L. Cupps	**DATE CHECKED:** March 1, 2022
APPROVED BY: E. McNally	**DATE APPROVED:** March 1, 2022

FIGURE 4

GROUNDWATER CONTAMINANT CONCENTRATIONS, DECEMBER 2021
BENSON-MONTIN-GREER
O-9 LINE LEAK LOCATION
N½ OF NE¼, SECTION 21, T26N, R1W
RIO ARRIBA COUNTY, NEW MEXICO

Attachments

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 Monitoring and Sampling
Site: BMG
Location: O-9
Tech: Jason Ogbi

Project No.:
Date: 12-07-21
Time: 10:20
Form: 1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	12:38	—	23.00	—	cut lock bracket
MW-2	13:23	—	22.01		cut lock bracket
MW-3	12:03	—	23.06	—	cut lock bracket
MW-4	12:27	—	17.10	—	cut lock bracket
MW-5	16:16	—	21.22	—	cut lock "
MW-6	14:07	—	20.24	—	lock cut "
MW-7	15:44		20.51		lock cut "
MW-8	13:35	—	19.09	—	lock cut "
MW-9	14:30		23.37		ok
MW-10	15:10	—	19.71	—	ok

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: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: SO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 23.00 Time: 12:38 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 23.00 Time: 12:40 (taken prior to purging well)
Final D.T.W. (ft): 24.52 Time: 13:10 (taken after sample collection)
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.:
Date: 12-07-21
Arrival Time: 12:38
Air Temp: cloudy 40°
T.O.C. Elev. (ft): 7507.22
Total Well Depth (ft): 24.78

Water Quality Parameters - Recorded During Well Purging

YSI # ___ Calibrated by:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
12:50	10.2	608	.78	7.0	-13.9	intial	Turbid No odor
13:10	9.6	563	4.8	7.1	39	1gal	Turbid No odor

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

BTEX per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)
GRO + DRO per EPA Method 8015M (250 mL Amber Glass)

Disposal of Purged Water: On ground - No drainage to road
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: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Low recharge of well. -JS

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-2

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

Site: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: JD
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.:
Date:
Arrival Time: 13:23
Air Temp: cloudy 48°
T.O.C. Elev. (ft): 7506.5
Total Well Depth (ft): 22.10

Initial D.T.W. (ft): 22.02 Time: 13:25 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 22.02 Time: 13:27 *(taken prior to purging well)*
Final D.T.W. (ft): 22.02 Time: 13:32 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Water Quality Parameters - Recorded During Well Purging

YSI #___ Calibrated by:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
		NO READINGS DUE - LOW WATER YIELD - JD					

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

BTEX per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2preserve)
GRO + DRO per EPA Method 8015M (250 mL Amber Glass)

Disposal of Purged Water: N/A
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: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: VERY LOW WATER YIELD

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: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician:
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 23.06 Time: 12:03 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 23.06 Time: 12:07 (taken prior to purging well)
Final D.T.W. (ft): 24.38 Time: 12:24 (taken after sample collection)
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Project No.:
Date: 12-07-21
Arrival Time: 10:20
Air Temp: Cloudy
T.O.C. Elev. (ft): 7508.63
Total Well Depth (ft): 28.14

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibrated by: JD

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
12:17	10.4	548	.79	6.9	202.4	1/total	Clear No odor
12:22	9.7	519	6.7	6.8	211.5	1/gal	Tan Turbid, No odor

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

~~BTEX per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2 preserve)~~
~~GRO + DRO per EPA Method 8015M (250 mL Amber Glass)~~
No Samples collected

Disposal of Purged Water: On Ground - No drainage to wash
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: 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: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: JD
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.:
Date: 12-07-21
Arrival Time: 12:27
Air Temp: Cloudy 40°
T.O.C. Elev. (ft): 7507.1
Total Well Depth (ft): 17.09

Initial D.T.W. (ft): 17.10 Time: 12:27 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 17.10 Time: 12:30 *(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: —

Water Quality Parameters - Recorded During Well Purging

YSI # — Calibrated by: —

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	SEE	NOTES	BELOW	—			ND
							Samples
							Taken - JD

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

VOCs Full List per EPA Method 8260 (5 - 40 mL Vials w/ HgCl2 preserve)
GRO + DRO per EPA Method 8015M (250 mL Amber Glass)

Disposal of Purged Water: N/A
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: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Only .01 ft. of water column for water quality reading - JD

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-5

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

Site: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: JD
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.:
Date: 12-7-21
Arrival Time: 16:10
Air Temp: cloudy
T.O.C. Elev. (ft):
Total Well Depth (ft): 21.70

Initial D.T.W. (ft): 21.22 Time: 16:16 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 21.22 Time: 16:18 *(taken prior to purging well)*
Final D.T.W. (ft): 21.22 Time: 16:20 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Water Quality Parameters - Recorded During Well Purging

YSI # ___ Calibrated by:

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 LOW WATER						
	NO SAMPLES COLLECTED						

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

VOCs Full List per EPA Method 8021 (5 - 40 mL Vials w/ HgCl2preserve)
GRO + DRO per EPA Method 8015M (250 mL Amber Glass)

Disposal of Purged Water: N/A
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: Keck Water Level or Keck Interface Level, YSI Water Quality Meter and New Disposable Bailer

Notes/Comments: Sock splued @ 16:27 and placed back into MW-5

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-6

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

Site: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: JD
Purge / No Purge: Purge
Well Diameter (in): 4
Initial D.T.W. (ft): 20.24 Time: 14:07 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 20.24 Time: 14:10 (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: 12-07-21
Arrival Time: 14:02
Air Temp: Cloudy 40°
T.O.C. Elev. (ft):
Total Well Depth (ft): 23.41

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibrated by: JD

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
14:17	10.1	557	.58	7.0	-7.8	Initial	clear no odor
14:21	10.1	557	1.21	7.0	11.6	1 gallon	clear no odor
							No samples collected - JD

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

VOCs Full List per EPA Method 8260 (5 - 40 mL Vials w/ HgCl2 preserve)
GRO + DRO per EPA Method 8015M (250 mL Amber Glass)

Disposal of Purged Water: On ground from bucket - No samples to work - JD
Collected Samples Stored on Ice in Cooler: No Samples
Chain of Custody Record Complete: N/A
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-7

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

Site: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: JB
Purge / No Purge: Purge
Well Diameter (in): 4

Project No.:
Date: 12-7-21
Arrival Time: 15:40
Air Temp: cloudy ≈40°
T.O.C. Elev. (ft):
Total Well Depth (ft): 21.82

Initial D.T.W. (ft): 20.51 **Time:** 15:44 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 20.51 **Time:** 15:45 *(taken prior to purging well)*
Final D.T.W. (ft): 21.05 **Time:** 15:54 *(taken after sample collection)*
If NAPL Present: D.T.P.: — **D.T.W.:** — **Thickness:** — **Time:** —

Water Quality Parameters - Recorded During Well Purging

YSI #___ Calibrated by:

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
15:55	—	—	—	—	—		Samples
							Collected
						low recharge	of well JB

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

VOCs Full List per EPA Method 8260 (5 - 40 mL Vials w/ HgCl2 preserve)
GRO + DRO per EPA Method 8015M (250 mL Amber Glass)

Disposal of Purged Water: On Ground - No drainage to wash
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: No readings from YSI - low water in well - JB

MONITORING WELL SAMPLING RECORD

Monitor Well No: **MW-8**

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

Site: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: JD
Purge / No Purge: Purge
Well Diameter (in): 4

Project No.:
Date: 12-07-21
Arrival Time: 13:35
Air Temp: cloudy 40°
T.O.C. Elev. (ft):
Total Well Depth (ft): 22.68

Initial D.T.W. (ft): 19.09 Time: 13:35 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 19.09 Time: 13:37 *(taken prior to purging well)*
Final D.T.W. (ft): 20.40 Time: 13:54 *(taken after sample collection)*
If NAPL Present: D.T.P.: — D.T.W.: — Thickness: — Time: —

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibrated by: JD

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
1347	11.1	587	.65	7.0	-79.5	initial	clear no odor
13:50	11.1	576	1.15	7.0	-42.2	1 gallon	Turbid no odor

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

~~*BTEX per EPA Method 8021 (3 - 40 mL Vials w/ HgCl2preserve)~~ JD
~~GRO + DRO per EPA Method 8015M (250 mL Amber Glass)~~ JD

Disposal of Purged Water: Onground - No drainage to wash
Collected Samples Stored on Ice in Cooler: No Samples
Chain of Custody Record Complete: N/A
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- 19

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

Site: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: JO
Purge / No Purge: Purge
Well Diameter (in): 2
Project No.:
Date: 12-07-21
Arrival Time: 14:30
Air Temp: Cloudy 40°
T.O.C. Elev. (ft):
Total Well Depth (ft): 27.43

Initial D.T.W. (ft): 23.37 **Time:** 14:30 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 23.37 **Time:** 14:32 *(taken prior to purging well)*
Final D.T.W. (ft): 26.93 **Time:** 1510 *(taken after sample collection)*
If NAPL Present: D.T.P.: — **D.T.W.:** — **Thickness:** — **Time:** —

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibrated by: JO

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
14:37	8.4	506	3.12	7.0	53.9	Initial .25	clear no odor
14:43	8.4	504	2.9	7.1	42.0	1 gallon	slightly turbid no odor
14:47	8.3	504	3.3	7.2	48.2	2 gallon	low turbid cooling no odor
1449	—	—	—	—	—		Sampled

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

VOCs Full List per EPA Method 8260 (5 - 40 mL Vials w/ HgCl2 preserve)

GRO + DRO per EPA Method 8015M (250 mL Amber Glass)

Disposal of Purged Water: On ground - No drainage [illegible]
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-10

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

Site: BMG
Location: O-9
Project: Groundwater Monitoring and Sampling
Sampling Technician: JO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 19.71 **Time:** 15:10 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 19.71 **Time:** 15:11 *(taken prior to purging well)*
Final D.T.W. (ft): 23.35 **Time:** 15:34 *(taken after sample collection)*
If NAPL Present: D.T.P.: — **D.T.W.:** — **Thickness:** — **Time:**

Project No.:
Date: 12-7-21
Arrival Time: 15:06
Air Temp: cloudy ±40°
T.O.C. Elev. (ft):
Total Well Depth (ft): ~~27.18~~ 27.43

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibrated by: JO

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
15:18	9.0	335	1.13	7.4	72.4	.25	clear no odor
15:22	9.0	358	2.1	7.4	73.7	1 gallon	clear no odor
15:28	8.3	350	1.8	7.5	88.1	2 gallon	clear no odor
15:38	—					Samples	taken @
						low reading in water table	

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

VOCs Full List per EPA Method 8260 (5 - 40 mL Vials w/ $HgCl_2$ preserve)
GRO + DRO per EPA Method 8015M (250 mL Amber Glass)

Disposal of Purged Water: On ground - [illegible]
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:

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

December 16, 2021

Elizabeth McNally

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

RE: BMG O 9 OrderNo.: 2112602

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 3 sample(s) on 12/9/2021 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 **2112602**
Date Reported: **12/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: BMG O 9
Collection Date: 12/7/2021 2:49:00 PM
Lab ID: 2112602-001 **Matrix:** AQUEOUS **Received Date:** 12/9/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/14/2021 2:53:15 PM	64436
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	12/14/2021 2:53:15 PM	64436
Surr: DNOP	92.9	64.8-167		%Rec	1	12/14/2021 2:53:15 PM	64436
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/10/2021 5:17:00 PM	R84463
Surr: BFB	112	68.5-136		%Rec	1	12/10/2021 5:17:00 PM	R84463
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Toluene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Ethylbenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Naphthalene	ND	2.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1-Methylnaphthalene	5.5	4.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
2-Methylnaphthalene	9.7	4.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Acetone	ND	10		µg/L	1	12/10/2021 6:29:00 PM	R84432
Bromobenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Bromoform	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Bromomethane	ND	3.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
2-Butanone	ND	10		µg/L	1	12/10/2021 6:29:00 PM	R84432
Carbon disulfide	ND	10		µg/L	1	12/10/2021 6:29:00 PM	R84432
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Chlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Chloroethane	ND	2.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Chloroform	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Chloromethane	ND	3.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Dibromomethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432

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 interference		

Analytical Report
Lab Order **2112602**
Date Reported: **12/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9
Project: BMG O 9
Collection Date: 12/7/2021 2:49:00 PM
Lab ID: 2112602-001 **Matrix:** AQUEOUS **Received Date:** 12/9/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
2-Hexanone	ND	10		µg/L	1	12/10/2021 6:29:00 PM	R84432
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2021 6:29:00 PM	R84432
Methylene Chloride	ND	3.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Styrene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Vinyl chloride	ND	1.0		µg/L	1	12/10/2021 6:29:00 PM	R84432
Xylenes, Total	ND	1.5		µg/L	1	12/10/2021 6:29:00 PM	R84432
Surr: 1,2-Dichloroethane-d4	85.2	70-130		%Rec	1	12/10/2021 6:29:00 PM	R84432
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	12/10/2021 6:29:00 PM	R84432
Surr: Dibromofluoromethane	94.4	70-130		%Rec	1	12/10/2021 6:29:00 PM	R84432
Surr: Toluene-d8	100	70-130		%Rec	1	12/10/2021 6:29:00 PM	R84432

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 interference		

Analytical Report
Lab Order **2112602**
Date Reported: **12/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-10
Project: BMG O 9
Collection Date: 12/7/2021 3:38:00 PM
Lab ID: 2112602-002 **Matrix:** AQUEOUS **Received Date:** 12/9/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **JME**	
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	12/14/2021 3:04:02 PM	64436
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	12/14/2021 3:04:02 PM	64436
Surr: DNOP	94.8	64.8-167		%Rec	1	12/14/2021 3:04:02 PM	64436
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **mb**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	12/10/2021 5:37:00 PM	R84463
Surr: BFB	108	68.5-136		%Rec	1	12/10/2021 5:37:00 PM	R84463
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Toluene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Ethylbenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Naphthalene	ND	2.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Acetone	ND	10		µg/L	1	12/10/2021 6:53:00 PM	R84432
Bromobenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Bromoform	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Bromomethane	ND	3.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
2-Butanone	ND	10		µg/L	1	12/10/2021 6:53:00 PM	R84432
Carbon disulfide	ND	10		µg/L	1	12/10/2021 6:53:00 PM	R84432
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Chlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Chloroethane	ND	2.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Chloroform	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Chloromethane	ND	3.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Dibromomethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432

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 interference		

Analytical Report
Lab Order **2112602**
Date Reported: **12/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-10
Project: BMG O 9
Collection Date: 12/7/2021 3:38:00 PM
Lab ID: 2112602-002 **Matrix:** AQUEOUS **Received Date:** 12/9/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
2-Hexanone	ND	10		µg/L	1	12/10/2021 6:53:00 PM	R84432
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2021 6:53:00 PM	R84432
Methylene Chloride	ND	3.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Styrene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Vinyl chloride	ND	1.0		µg/L	1	12/10/2021 6:53:00 PM	R84432
Xylenes, Total	ND	1.5		µg/L	1	12/10/2021 6:53:00 PM	R84432
Surr: 1,2-Dichloroethane-d4	85.9	70-130		%Rec	1	12/10/2021 6:53:00 PM	R84432
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	12/10/2021 6:53:00 PM	R84432
Surr: Dibromofluoromethane	93.7	70-130		%Rec	1	12/10/2021 6:53:00 PM	R84432
Surr: Toluene-d8	100	70-130		%Rec	1	12/10/2021 6:53:00 PM	R84432

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 interference		

Analytical Report
Lab Order **2112602**
Date Reported: **12/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG O 9 **Collection Date:**
Lab ID: 2112602-003 **Matrix:** TRIP BLANK **Received Date:** 12/9/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Toluene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Ethylbenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Naphthalene	ND	2.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
2-Methylnaphthalene	ND	4.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Acetone	ND	10		µg/L	1	12/10/2021 7:16:00 PM	R84432
Bromobenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Bromodichloromethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Bromoform	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Bromomethane	ND	3.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
2-Butanone	ND	10		µg/L	1	12/10/2021 7:16:00 PM	R84432
Carbon disulfide	ND	10		µg/L	1	12/10/2021 7:16:00 PM	R84432
Carbon Tetrachloride	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Chlorobenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Chloroethane	ND	2.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Chloroform	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Chloromethane	ND	3.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
2-Chlorotoluene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
4-Chlorotoluene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
cis-1,2-DCE	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Dibromochloromethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Dibromomethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,1-Dichloroethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,1-Dichloroethene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2-Dichloropropane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,3-Dichloropropane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
2,2-Dichloropropane	ND	2.0		µg/L	1	12/10/2021 7:16:00 PM	R84432

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 interference		

Analytical Report
Lab Order **2112602**
Date Reported: **12/16/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG O 9 **Collection Date:**
Lab ID: 2112602-003 **Matrix:** TRIP BLANK **Received Date:** 12/9/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Hexachlorobutadiene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
2-Hexanone	ND	10		µg/L	1	12/10/2021 7:16:00 PM	R84432
Isopropylbenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
4-Isopropyltoluene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
4-Methyl-2-pentanone	ND	10		µg/L	1	12/10/2021 7:16:00 PM	R84432
Methylene Chloride	ND	3.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
n-Butylbenzene	ND	3.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
n-Propylbenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
sec-Butylbenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Styrene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
tert-Butylbenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
trans-1,2-DCE	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Trichlorofluoromethane	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Vinyl chloride	ND	1.0		µg/L	1	12/10/2021 7:16:00 PM	R84432
Xylenes, Total	ND	1.5		µg/L	1	12/10/2021 7:16:00 PM	R84432
Surr: 1,2-Dichloroethane-d4	87.2	70-130		%Rec	1	12/10/2021 7:16:00 PM	R84432
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	12/10/2021 7:16:00 PM	R84432
Surr: Dibromofluoromethane	96.2	70-130		%Rec	1	12/10/2021 7:16:00 PM	R84432
Surr: Toluene-d8	101	70-130		%Rec	1	12/10/2021 7:16:00 PM	R84432

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 interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112602**
16-Dec-21

Client: Animas Environmental Services
Project: BMG O 9

Sample ID: **MB-64436**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **64436**	RunNo: **84493**
Prep Date: **12/13/2021**	Analysis Date: **12/14/2021**	SeqNo: **2970429** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.42		0.5000		84.6	64.8	167			

Sample ID: **LCS-64436**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **64436**	RunNo: **84493**
Prep Date: **12/13/2021**	Analysis Date: **12/14/2021**	SeqNo: **2970432** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	2.2	1.0	2.500	0	89.2	73	138			
Surr: DNOP	0.21		0.2500		84.3	64.8	167			

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	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#: **2112602**
16-Dec-21

Client: Animas Environmental Services
Project: BMG O 9

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **R84463**	RunNo: **84463**
Prep Date:	Analysis Date: **12/10/2021**	SeqNo: **2967520** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	21		20.00		107	68.5	136			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **R84463**	RunNo: **84463**
Prep Date:	Analysis Date: **12/10/2021**	SeqNo: **2967541** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.51	0.050	0.5000	0	103	80	120			
Surr: BFB	23		20.00		116	68.5	136			

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	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#: **2112602**
16-Dec-21

Client: Animas Environmental Services
Project: BMG O 9

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R84432**	RunNo: **84432**
Prep Date:	Analysis Date: **12/10/2021**	SeqNo: **2966261** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	87.8	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	16	1.0	20.00	0	82.0	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.4	70	130			
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.9	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.5	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.3	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84432**	RunNo: **84432**
Prep Date:	Analysis Date: **12/10/2021**	SeqNo: **2967206** 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:

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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	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#: **2112602**
16-Dec-21

Client: Animas Environmental Services
Project: BMG O 9

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84432**	RunNo: **84432**
Prep Date:	Analysis Date: **12/10/2021**	SeqNo: **2967206** 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 interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2112602**
16-Dec-21

Client: Animas Environmental Services
Project: BMG O 9

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R84432**	RunNo: **84432**
Prep Date:	Analysis Date: **12/10/2021**	SeqNo: **2967206** 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	8.6		10.00		86.0	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.1	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.2	70	130			
Surr: Toluene-d8	10		10.00		101	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 interference
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: 2112602

RcptNo: 1

Received By: **Tracy Casarrubias** 12/9/2021 7:25:00 AM

Completed By: **Tracy Casarrubias** 12/9/2021 9:00:44 AM

Reviewed By: JM 12/9/21

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: CMC 12/9/21

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	Not Present			

Chain-of-Custody Record

Client: **Animas Environmental Services**

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

Phone #: 505-564-2281

Email or Fax#: lcupps@animasenvironmental.com

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

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

X Standard ☐ Rush_____

Project Name: **BMG O-9**

Project #:

Project Manager: **Elizabeth McNally/ Lany Cupps**

Sampler: JO
On Ice: ☑ Yes ☐ No
Sample Temperature: 3.1-0=3.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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.	VOCs Fll List (8260))	TPH (GRO/DRO) (8015)							Air Bubbles (Y or N)
						2112602									
~~12-7-21~~		H_2O	~~MW-4~~	5- 40 mL VOA 250 mL amber glass	5-HgCl2 1-cool		x	X							
~~12-7-21~~		H_2O	~~MW-5~~	5- 40 mL VOA 250 mL amber glass	5-HgCl2 1-cool		x	x							
12-7-21	14:49	H_2O	MW-9	5- 40 mL VOA 250 mL amber glass	5-HgCl2 1-cool	001	x	x							
12-7-21	15:38	H_2O	MW-10	5- 40 mL VOA 250 mL amber glass	5-HgCl2 1-cool	002	x	x							
			Trip Blank			003									
		H_2O	Trip blank	2 - 40 mL VOA			x	x							

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/8/21	1640			12/8/21	1640
Date:	Time:	Relinquished by:	Received by:	Date	Time
12/8/21	1847		Carrier	12/9/21	7:25

Remarks: Direct bill to BMG. Call with any questions.

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.

July 28, 2022

Nelson Velez
Environmental Specialist - Advanced
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Via electronic mail with delivery confirmation to:
Nelson.Velez@state.nm.us

RE: Request for Variance per Subsection D of Section 9 of 19.15.30 NMAC
O-9 Pipeline Release
NMOCD Order Number: AP-31, NMOCD Incident Number: NAUTOFWCO00437
Rio Arriba County, New Mexico

Dear Mr. Velez:

On behalf of Benson-Montin-Greer Drilling Corporation (BMG), Animas Environmental Services LLC (AES) submitted the *Q4 2021 and Final Groundwater Monitoring Report* (dated March 5, 2022) to the New Mexico Environment Department's (NMED) Oil Conservation Division (NMOCD) for the O-9 Pipeline Release (NMOCD Order Number AP-31, Incident Number NAUTOFWCO00427). In this report, AES concluded that monitor wells MW-1 through MW-3 and MW-5 through MW-8 have complied with New Mexico Administrative Code (NMAC) 19.15.30.9.D, as they have recorded eight (8) or more consecutive quarters of sampling results for volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH) that meet the constituent of concerns within the abatement standards in Subsections A, B, and C of 19.15.30.9 NMAC. The three (3) remaining monitor wells at the site, MW-4, MW-9, and MW-10, do not meet this standard:

- MW-4 was sampled four (4) times between 2000 and 2019, and had no analytical detections in any of the sampling events. Due to dropping groundwater elevations, AES has not been able to collect a verifiable sample from MW-4 since April 3, 2019;
- MW-9 was sampled for five (5) consecutive quarterly events from November 2020 to December 2021, with analytical results that meet the abatement standards in Subsections A, B, and C of 19.15.30.9 NMAC; and,
- MW-10 was sampled for four (4) consecutive quarterly events from February 2021 to December 2021, and had no analytical detections in any of the sampling events.

624 E Comanche Street
P.O. Box 8
Farmington, NM 87499-0008
505-564-2281

www.animasenvironmental.com

As stated in the March 2022 report, soil concentrations from samples collected in November 2020 and site lithology indicate, together with dissolved phase concentrations, that the soil-to-groundwater pathway will likely continue to have stable to decreasing VOC and TPH groundwater concentrations, with VOC and TPH soil concentrations remaining below NMED action levels (Subsection B of 19.15.29.12 NMAC) and soil contaminant concentrations remaining below NMED screening levels *(Volume I – Soil Screening Guidance for Human Health Risk Assessment, February 2019; Revision 2 June 2019)*.

No sensitive receptors (schools, nursing homes, etc.) or registered domestic water wells are located in close proximity to the site. The site is on rural U.S. Forest Service land approximately 15 miles north of the nearest settlement of Lindrith, New Mexico, and no potentially complete exposure pathways have been identified.

Based on this information, AES requested that NMOCD grant a variance under 20.6.2.1210 NMAC to allow monitor wells MW-4, MW-9, and MW-10 to be plugged and abandoned. However, NMOCD cannot grant variances under this regulation, which refers to actions to be taken by the WQCC. Therefore, AES requests that NMOCD grant the variance under Subsection D of 19.15.30.9 NMAC.

If you have any questions about this request or site conditions, please contact Angela Ledgerwood at 720-537-6650.

Respectfully Submitted,

Angela Ledgerwood
Senior Project Manager

Cc: Zach Stradling (*zstradling@bmgdrilling.com*)
Production Engineer
Benson-Montin-Greer Drilling Corporation
4900 College Boulevard
Farmington, New Mexico 87402

Larry D. Gore (*larry.gore@usda.gov*)
U.S. Forest Service
Santa Fe National Forest
P.O. Box 130
Cuba, New Mexico 87013

State of New Mexico
Energy, Minerals and Natural Resources Department

Zach Stradling
Benson-Montin-Greer Drilling Corporation
4900 College Boulevard
Farmington, NM 87402

RE: Variance Request Approval for Lesser Number of Samples per Subsection D of 19.15.30.9 NMAC
Ojito O-9 Pipeline Release, Rio Arriba County, NM
Incident #: NAUTOFWCO00437; Administrative Order: AP-31

Mr. Stradling:

The Oil Conservation Division (OCD) has reviewed the file for the release referenced above as well as the July 28, 2022 letter sent on Benson-Montin-Greer Drilling Corporation (BMG) behalf by Animas Environmental Services submitted via email that same day.

The available information indicates BMG has met the requirements of Subsection D of 19.15.30.9 NMAC with the exception of three (3) groundwater monitor wells, namely MW-4, MW-9, and MW-10.

These three (3) test wells have recorded a decrease in groundwater elevation and demonstrates a depletion in water storage to the point no verifiable samples can be obtained in the foreseeable future. In addition, all previous laboratory results from these test wells had either no analytical detection or met the New Mexico Water Quality Control Commission's allowable concentrations for the constituent of concern, namely BTEX.

Due to the existing conditions stated above, your variance request for an alternative lesser number of samples to the eight (8) consecutive sampling requirements within Subsection D of 19.15.30.9 NMAC to meet the applicable abatement standards in Subsections A, B and C of 19.15.30.9 NMAC is approved.

This finding by the OCD does not relieve BMG of responsibility if future information shows a threat to ground water, surface water, human health, or the environment. Further, it does not relieve BMG of responsibility for compliance with any federal, state, or local law.

If you have any questions, please contact Nelson Velez of the Environmental Incident Group at (505) 469-6146 or by email at *nelson.velez@emnrd.nm.gov.*

Respectfully,

Adrienne Sandoval
Division Director
AES/njv

Date: 10/20/2022

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 91932

CONDITIONS

Operator:	OGRID:
BENSON-MONTIN-GREER DRILLING CORP 4900 College Blvd. Farmington, NM 87402	2096
	Action Number: 91932
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	In order to proceed with final closure via Abatement Closure Report (ACR), a variance request was warranted due to change in groundwater conditions. Variance letter dated, July 28, 2022 was submitted and approved on October 20, 2022. Upon receipt of this approval, Benson-Montin-Greer Drilling Corporation has approximately 60 days (deadline date: 12/23/2022) to submit a ACR per Subsection B of 19.15.30.19 NMAC.	10/21/2022