REVIEWED
By Mike Buchanan at 10:04 am, Apr 23, 2024

animas environmental services

February 28, 2024

Review of the Q1 through Q4 Annual Progress Report for Highway 537 Truck Receiving Station: Content Satisfactory
1. Proceed with plans to sample VOCs quarterly, Phenols and dissolved manganese annually
2. Gauge all wells for depth to groundwater and water quality parameters annually
3. Replace MW-1 sock on an as needed basis
4. Submit next groundwater monitoring report and site status update by April 1, 2025.
(BMG: Animas Environmental Services Report, which provides details of monitoring and sampling of site wells at the BMG Highway 537 Truck Receiving Station 2009 Release location.

Nelson Velez
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: 2023 Q1 through Q4 Annual Progress Report
Benson-Montin-Greer Drilling Corporation
Highway 537 Truck Receiving Station 2009 Release
Rio Arriba County, New Mexico
AP-137 (Formerly 3RP-448)
Incident #NRMD0929447874

Dear Mr. Velez:

On behalf of Benson-Montin-Greer Drilling Corporation (BMG), Animas Environmental Services, LLC (AES) has prepared this Annual 2023 Progress Report, which provides details of monitoring and sampling of site wells at the BMG Highway 537 Truck Receiving Station 2009 Release location. Site activities were conducted in accordance with a Stage 1 and 2 Abatement Plan dated June 14, 2019; Abatement Plan approval is currently pending.

1.0 Site Information

1.1 Site Location

The 2009 release originated on the Schmitz Ranch, on the south side of Highway 537 and within the bermed area of the Highway 537 Truck Receiving Station. The station is adjacent to the Los Ojitos Arroyo, which ultimately drains to Largo Canyon. The release location is legally described as being located within the SW¼ NW¼ Section 18, T25N, R3W in Rio Arriba County, New Mexico. Latitude and longitude were recorded as being N36.39866 and W107.19328, respectively. A topographic site location map, based on an excerpt from the U.S. Geological Survey (USGS) 7.5-minute Schmitz Ranch, Rio Arriba County, New Mexico topographic quadrangle, is included as Figure 1, and a general site plan is presented as Figure 2.

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1.2 Release History

January 29, 2009. A Western Refining truck driver discovered crude condensate within the bermed area around the storage tanks, on the south side of Tank #1. BMG personnel arrived on-site and confirmed a leak from a buried 6-inch line between the storage tanks and the truck loading pump. The release was the result of a corrosion hole along the bottom of the pipe near the truck loading pumps.

February 2, 2009. The 6-inch line was repaired, and the excavation was backfilled with clean fill material. Approximately 100 cubic yards (CY) of contaminated soil were transported to the TNT Landfarm for disposal.

1.3 Site Investigation and Monitor Well Installation

February 16 through 20, 2009. Site investigation activities were conducted by AES to delineate the full extent of petroleum hydrocarbon impact on surface and subsurface soils and groundwater resulting from the release. The investigation included the installation of 11 monitor wells (MW-1 through MW-11) and collection of soil and groundwater samples. Note that non-aqueous phase liquid (NAPL) was not observed during groundwater monitor well installation or subsequent sampling.

Soils were found to consist of interbedded layers of moist reddish-brown clayey and silty sand, moist reddish-brown silty and sandy clay, poorly sorted tan sands and sandstone, and moist stiff brown clays. Soil contaminant concentrations exceeded New Mexico Oil Conservation Division (NMOCD) action levels for total benzene, toluene, ethylbenzene, and total xylenes (BTEX) in samples collected from the installation boreholes for wells MW-1, MW-3, MW-4, and MW-8. Soil concentrations for total petroleum hydrocarbons (TPH) exceeded laboratory detection limits in samples from boreholes for wells MW-1, MW-3, MW-4, and MW-8. The highest total BTEX concentrations and total TPH concentrations were reported at 345 milligrams per kilogram (mg/kg) and 8,100 mg/kg, respectively, at 26 feet below ground surface (ft bgs) in MW-3. Details of the site investigation are included in the AES *Site Investigation Report* submitted to NMOCD in April 2009.

May 12 and June 4, 2014. AES conducted further site assessment on behalf of BMG as part of termination of the site lease and removal of site structures and infrastructure. The work included soil sampling during the excavation of hydrocarbon contaminated soils, discovered when the storage tanks and truck loading station were removed from the site, and a subsequent assessment of subsurface soils, utilizing a Geoprobe.

- Former Tank Area: Under the former tank area, the field screening results for volatile organic compounds (VOCs) via organic vapor meter (OVM) ranged from 0.0 parts per million (ppm) in SB-1, SB-2, SB-4, and SB-6 up to 1,048 ppm in SB-5 (8 to 12 ft bgs). Except for SB-5, VOC concentrations in the tank area borings were below the NMOCD action level of 100 ppm VOCs. Field TPH concentrations were also below the NMOCD action level of 100 mg/kg in all borings, except SB-5, in which the highest TPH concentration was noted at 225 mg/kg (12 to 16 ft bgs). The remaining intervals in SB-5 had TPH concentrations of 61.5 mg/kg (4 to 8 ft and 8 to 12 ft bgs) and 69.2 mg/kg (16 to 20 ft bgs). Excepting SB-5, residual contaminant concentrations below the former tank area were below applicable NMOCD action levels for VOCs and TPH.

- Former Truck Loading Station: Under the former loading area, the field screening results for VOCs via OVM ranged from 0.3 ppm in SB-15, SB-16, SB-17, and SB-20, up to greater than 5,000 ppm in SB-11 through SB-14, SB-18, and SB-19. Field TPH concentrations were also reported above the NMOCD action level of 100 mg/kg. Based on VOC and TPH concentrations, residual contaminants in subsurface soils were still present at the former truck loading station area and former pump area. Results of the excavation assessment confirmed that residual contaminants were present under the former loading area; approximately 600 CY of petroleum-impacted soil were subsequently removed from the excavated areas and transported to the BMG Landfarm by TPC, LLC. Results of the excavation assessment were submitted in a report dated November 12, 2014.

1.4 Groundwater Monitoring and Sampling, 2009 to 2017

AES conducted quarterly to semi-annual groundwater measurement and sampling from March 2009 through August 2017. Note that MW-2, MW-4, MW-5, MW-6, MW-7, MW-10, and MW-11 had either trace concentrations or concentrations below laboratory detection limits since the wells were installed. In the remaining wells, MW-1, MW-3, MW-8, and MW-9, there were significant contaminant reductions through monitored natural attenuation; however, in 2014, 1.18 ft of NAPL was detected in MW-1 after groundwater in the area had declined approximately 3 ft over a 5-year period.

By 2016, 9 of the 11 monitor wells (MW-2 and MW-4 through MW-11) had eight or more consecutive sampling events with readings below applicable New Mexico Water Quality Control Commission (WQCC) standards. Cumulative groundwater measurement and water quality data are presented in Table 1, and a summary of groundwater analytical results is presented in Table 2.

1.5 Monitor Well P&A—MW-6 through MW-11, August 2017

On August 7, 2017, BMG, with approval from NMOCD, completed the plugging and abandonment (P&A) of six monitor wells located at the site, including MW-6 through MW-11. These monitor wells all had at least eight consecutive events of groundwater contaminant concentrations below laboratory detection limits or below applicable New Mexico WQCC standards. At the request of NMOCD, MW-2, MW-4, and MW-5 were kept open so that they could continue to be gauged for depth to groundwater and hydraulic gradient could be determined.

1.6 NAPL Recovery Efforts in MW-1

NAPL was first observed in MW-1 in April 2014, when groundwater elevations gradually declined about 3 ft from when the wells were first installed in 2009. By August 2014, BMG had arranged for aggressive NAPL recovery to be implemented with a high vacuum multi-phase extraction (MPE) unit, which was powered by a mobile internal combustion engine (ICE) unit. The unit ran between August and November 2014 and April to May 2015. In 2014, 1,957 pounds (lbs) of petroleum hydrocarbons were removed as a combination of vapors, NAPL (limited), and dissolved phase constituents. In 2015, approximately 1,874 lbs of hydrocarbons were removed as a combination of vapors and dissolved phase constituents. MPE operations were suspended in May 2015 because of high production of water and rapidly decreasing mass removal rates.

A short pilot study utilizing a low vacuum Solar Sipper was conducted in January 2015; success was moderate primarily because of short daylight hours.

Limited hand-bailing was conducted from 2014 through 2016, and on a quarterly basis in 2017. After further NAPL testing in 2017 showed that the transmissivity of the residual NAPL had decreased to well below 0.5 square feet per day (ft^2/day), NMOCD allowed NAPL recovery to continue via hand-bailing on a monthly basis. Based on data from monthly hand-bailing events from 2018 through March 2019, measured NAPL thickness in MW-1 continued to decrease and remains below the recommended NAPL thickness of 0.5 ft for conducting additional transmissivity testing.

Results of NAPL recovery efforts since 2014, when NAPL was first observed in MW-1, are summarized below. Groundwater and NAPL measurement data are included in Table 1, and historic groundwater analytical results are found in Table 2.

Petroleum Hydrocarbon Mass Removal from MW-1, 2014-2018, BMG Hwy 537 2009 Release

Time Period	*Mass Petroleum Hydrocarbons Removed (lbs)*
August to November 2014 (MPE)	1,957
Pilot Study January 2015 (Solar Sipper)	8
April to May 2015 (MPE)	1,874
Hand-Bailing (2016-2017)	62
Hand-Bailing (2018)	12
Cumulative Mass	***3,913***

Residual NAPL continued to be observed in MW-1 throughout 2020 (0.01 ft in March 2020 to 0.05 ft in September 2020), and a hydrophobic absorbent sock was installed in MW-1 in June 2020. The sock is checked periodically and replaced as needed; however, no significant quantity of NAPL has been recovered since residual NAPL was reduced to a sheen in 2020.

1.7 Site Activities, 2019 to 2022

1.7.1 Groundwater Monitoring and Sampling, March 2019

AES conducted groundwater monitoring and sampling in March 2019. NAPL was detected in MW-1 (0.01 ft). After fully bailing off NAPL, groundwater samples from MW-1 were submitted for laboratory analysis. The dissolved benzene concentration of 340 micrograms per liter (µg/L) exceeded the WQCC standard of 5 µg/L.

Geochemical analyses were also collected to assist in determining chemical injection masses for treatment of residual contaminants. Samples from MW-1 were laboratory analyzed for the following:

- Dissolved iron and manganese (USEPA Method 6020);
- Total iron and manganese (USEPA Method 6010); and,
- Nitrate and sulfate (USEPA Method 300.0).

Groundwater and NAPL measurement data are included in Table 1, and historic groundwater analytical results are tabulated and presented in Tables 2 and 3.

1.7.2 Soil Boring Installation and Groundwater Sampling, September 2019

On September 5, 2019, AES installed two soil borings (B1 and B2) in accordance with the proposed Abatement Plan to assist in planning for chemical injections at the location. Site lithology at B1 was observed to consist of cobbles and sandy soils from the surface to 5 ft bgs, clay and sand from 5 to 25 ft bgs, and clay from 20 ft to 35 ft bgs. Boring B2 is characterized by clay with sand to 5 ft bgs, clayey sand from 5 to 25 ft bgs, and clay to 35 ft bgs. Strong odors were noted throughout both borings until the terminal depths of 35 ft bgs.

Elevated petroleum hydrocarbon BTEX contaminants above the NMOCD action levels were present in soil at B1 from the surface to 30 ft bgs, and at B2 at 15 and 20 ft bgs. Elevated TPH (as gasoline-range organics [GRO], diesel-range organics [DRO], and motor oil-range organics [MRO]) concentrations were present throughout B1, and in B2 to a depth of 25 ft bgs. Chloride concentrations were below laboratory detection levels.

On September 25, 2019, groundwater gauging and sampling occurred. Residual NAPL was observed in MW-1 (0.08 ft), and MW-5 was noted to have a damaged well casing. NAPL was effectively bailed off from MW-1 (source area well), and samples were collected for laboratory analysis of WQCC parameters listed in NMAC 20.6.2.3103 as noted in the Abatement Plan. MW-1 exceeded WQCC standards for benzene (88 µg/L), total dissolved solids (TDS) (3,500 milligrams per liter [mg/L]), sulfate (1,800 mg/L), phenols (0.028 mg/L), uranium (0.036 mg/L), total aluminum (20 mg/L), total iron (28 mg/L), and total manganese (0.68 mg/L). Groundwater concentrations were either below laboratory detection limits or below applicable WQCC standards for all other parameters analyzed.

1.7.3 Abatement Plan

A Stage 1 and 2 Abatement Plan was submitted to NMOCD for approval on June 14, 2019, in accordance with a request from NMOCD dated March 21, 2019. Plan approval is currently pending.

1.7.4 Groundwater Monitoring and Sampling, 2020

On March 25, June 23, September 23, and November 23, 2020, groundwater samples were collected from MW-1 (source area well). Additionally, on March 25 and June 23, 2020, groundwater samples were collected from MW-2 (up-gradient well). Groundwater gauging occurred at other site wells during all quarterly events to assist in calculating hydraulic gradient.

Depth to groundwater at the site gradually and slightly decreased at all wells between the March and November 2020 events. The groundwater elevation at MW-1 (31.53 ft bgs)

decreased to a near record low at MW-1 (31.65 ft bgs), and to record lows at MW-2 through MW-5, with elevations ranging from 30.84 ft bgs at MW-3 to 31.66 ft bgs at MW-5 in November 2020. Gradient was calculated to be to the southwest which is consistent with previous site data.

Residual NAPL was observed in MW-1 (0.01 ft in March 2020 to 0.05 ft in September 2020). NAPL was effectively bailed off to a sheen, a hydrophobic absorbent sock was installed in June 2020.

MW-1 exceeded WQCC standards for: benzene (220 µg/L in March, 760 µg/L in June, 9.7 µg/L in September, and 110 µg/L in November 2020) and dissolved manganese (0.52 mg/L in March and 0.66 in June 2020).

1.7.5 Groundwater Monitoring and Sampling, 2021

On March 17, June 17, September 29, and December 14, 2021, groundwater samples were collected from MW-1 (source area well). Groundwater gauging occurred at other site wells to assist in calculating hydraulic gradient.

Depth to groundwater at the site rebounded slightly between the November 2020 and March 2021 sampling events, but then decreased to record lows in each well in subsequent events, with December 2021 depths to groundwater ranging from 32.01 ft bgs at MW-1 to 32.5 ft bgs at MW-3 and MW-4. Gradient was calculated to be to the southwest and is consistent with previous site data;

Residual NAPL was observed in MW-1 (sheen in March to 0.02 ft in September 2021). NAPL was effectively bailed off to a sheen during all four events, and samples were collected in from MW-1. In addition, a hydrophobic absorbent sock installed in June 2020 continues to be utilized in MW-1;

MW-1 exceeded the WQCC standard of 5 µg/L for benzene with 160 µg/L in March, 14 µg/L in June, 190 µg/L in September, and 54 µg/L in December. This well surpassed the WQCC standard of 0.2 mg/L for dissolved manganese with 0.42 mg/L in September.

1.7.6 Groundwater Monitoring and Sampling, 2022

On March 8, June 9, September 28, and December 1, 2022, groundwater samples were collected from MW-1 (source area well). Groundwater gauging occurred at other site wells to assist in calculating hydraulic gradient.

Depth to groundwater at the site was near record lows in June 2022 then rebounded slightly in September 2022. December 2022 depths to groundwater ranged from 30.59 ft

bgs at MW-3 to 31.51 ft bgs at MW-5. Gradient was calculated to be to the southwest and was consistent with previous site data.

Residual NAPL was observed in MW-1 as a sheen in March, June, and September 2022. NAPL was effectively bailed off to a sheen during each of these sampling events, and samples were collected in from MW-1. No NAPL sheen was observed in MW-1 during the December 2022 sampling event for the first time since March 2019. Note that a hydrophobic absorbent sock installed in June 2020 continues to be utilized in MW-1.

MW-1 exceeded the WQCC standard of 5 µg/L for benzene with 180 µg/L in March, 76 µg/L in June, 160 µg/L in September, and 380 µg/L in December. Mann-Kendall trend analysis could not confirm an increasing or decreasing trend for these concentrations. This well continued to exceed the dissolved phase manganese WQCC standard, with the most recent concentration reported at 0.27 mg/L.

2.0 Groundwater Monitoring and Sampling, 2023

Groundwater monitoring and sampling was conducted by AES in March, June, September, and December 2023. All samples were preserved in laboratory-supplied containers and stored in an insulated cooler containing ice. Samples were shipped via laboratory courier in chilled and insulated coolers at less than 6°C to the analytical laboratory.

Groundwater elevations are presented in Table 1. Water sample collection forms are presented in Appendix A, and laboratory analytical reports are in Appendix B.

2.1 March 2023

For Q1 of 2023, groundwater monitoring of all site wells and sampling of MW-1 was conducted by AES on March 15, 2023. During the sampling event, a residual NAPL sheen was detected in MW-1 before the initial bail. NAPL was bailed from this well, and because groundwater recharge was sufficient, samples were able to be collected for laboratory analysis.

Groundwater Elevations and Water Quality Measurements

Depth to groundwater at the site ranged from 28.84 ft bgs at MW-3 to 30.39 ft bgs at MW-5. Field water quality measurements were not obtained from MW-1 due to the residual NAPL sheen, and MW-5 was noted to have a damaged well casing. Groundwater gradient was calculated to be 0.007 ft/ft in a west-northwestern direction between MW-2

and MW-5. March 2023 groundwater elevations and contours are presented in Figure 3A.

Groundwater Laboratory Analyses

Groundwater samples from MW-1 (near the release area) were submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico (Hall), for analysis of the following parameters listed in NMAC 20.6.2.3103(A-C) in accordance with the proposed Abatement Plan:

- Volatile organic compounds (VOCs) per USEPA Method 8260.

Groundwater Laboratory Analytical Results

Groundwater analytical results for MW-1 showed concentrations *above WQCC standards* for the following parameters:

- Benzene - 430 µg/L (WQCC standard 5 µg/L).

Groundwater analytical results are tabulated and presented in Tables 2 and 3 and are also presented on Figure 4. The laboratory analytical report is included in Appendix B.

2.2 June 2023

Groundwater monitoring of all site wells and sampling of monitor well MW-1 was conducted by AES on June 21, 2023, for Q2 2023. During the sampling event, residual NAPL (0.01 ft) was observed in MW-1. NAPL was bailed from this well, and because groundwater recharge was sufficient, samples were able to be collected for laboratory analysis.

Groundwater Elevations and Water Quality Measurements

Depth to groundwater at the site ranged from 29.96 ft bgs at MW-3 to 30.91 ft bgs at MW-5. NAPL was measured only at MW-1 (0.01 ft). Field water quality measurements were collected from MW-5, with: temperature 13.4°C, specific conductivity 4.411 mS, dissolved oxygen 3.9 mg/L, pH 7.2, and ORP 22.8 mV. Groundwater gradient was calculated to be 0.006 ft/ft in a western direction. June 2023 groundwater elevations and contours are presented in Figure 3B.

Groundwater Laboratory Analyses

Groundwater samples from MW-1 (near the release area) and MW-5 were submitted to Hall in Albuquerque, New Mexico, for analysis of the following parameters listed in NMAC 20.6.2.3103(A-C) in accordance with the proposed Abatement Plan:

- Dissolved manganese per USEPA Method 200.7; and
- Total Phenolics by SW-846 9067.

Groundwater Laboratory Analytical Results
Groundwater analytical results for MW-1 showed concentrations *above WQCC standards* for the following parameters:

- Dissolved manganese – 0.26 mg/L (WQCC standard 0.2 mg/L); and
- Phenols – 3.1 mg/L (WQCC standard 0.005 mg/L).

Groundwater analytical results for MW-5 showed a dissolved manganese concentration (0.056 mg/L), which is below the WQCC standard. Note that the laboratory detection limit of 3.0 mg/L exceeded the WQCC standard for phenols. Groundwater analytical results are tabulated and presented in Tables 2 and 3 and are also presented on Figure 4.

2.3 September 2023

For Q3, groundwater monitoring of all site wells and sampling of monitor well MW-1 was conducted by AES on September 13, 2023. During the sampling event, a NAPL sheen remained in MW-1. NAPL was bailed from this well, and because groundwater recharge was sufficient, samples were collected for laboratory analysis.

Groundwater Elevations and Water Quality Measurements
Depth to groundwater at the site ranged from 30.48 ft bgs at MW-3 to 31.91 ft bgs at MW-4. Residual NAPL was measured only at MW-1 (sheen). Groundwater gradient was calculated to be 0.011 ft/ft in a southwestern direction. September 2023 groundwater elevations and contours are presented in Figure 3C.

Groundwater Laboratory Analyses
Groundwater samples from MW-1 (near the release area) were submitted to Hall in Albuquerque, New Mexico, for analysis of the following parameters listed in NMAC 20.6.2.3103(A-C) in accordance with the proposed Abatement Plan:

- VOCs per USEPA Method 8260.

Groundwater Laboratory Analytical Results
Groundwater analytical results for MW-1 showed concentrations *above WQCC standards* for the following parameters:

- Benzene - 250 µg/L (WQCC standard 5 µg/L).

Groundwater analytical results are tabulated and presented in Tables 2 and 3; and are also presented on Figure 4.

2.4 December 2023

Groundwater monitoring of all site wells and sampling of monitor well MW-1 was conducted by AES on December 13, 2023, for Q4 2023. During the sampling event, a residual NAPL sheen was observed in MW-1. NAPL was bailed from this well, and because groundwater recharge was sufficient, samples were able to be collected for laboratory analysis.

Groundwater Elevations and Water Quality Measurements
Depth to groundwater at the site ranged from 30.04 ft bgs at MW-4 to 31.78 ft bgs at MW-5. The calculated groundwater gradient was essentially flat. December 2023 groundwater elevations and contours are presented in Figure 3D.

Groundwater Laboratory Analyses
Groundwater samples from MW-1 (near the release area) were submitted to Eurofins Environment Testing South Central (formerly Hall) in Albuquerque, New Mexico (Eurofins), for analysis of the following parameters:

- VOCs per USEPA Method 8260;
- Sulfate per USEPA Method 300.0; and
- Total dissolved solids (TDS) per SM2540C MOD.

Groundwater Laboratory Analytical Results
Groundwater analytical results for MW-1 showed concentrations *above WQCC standards* for the following parameters:

- Benzene - 300 µg/L (WQCC standard 5 µg/L);
- Sulfate – 1,700 mg/L (WQCC standard 600 mg/L); and
- TDS – 3,120 mg/L (WQCC standard 1,000 mg/L).

Groundwater analytical results are tabulated and presented in Tables 2 and 3; and are also presented on Figure 4.

3.0 Discussion

Under NMAC 9.15.30 for Abatement Plans, groundwater sampling for parameters listed in NMAC 20.6.2.3103(A-C) are required to identify parameters that may be contaminants of concern. Comprehensive sampling for all parameters was first completed in MW-1 (source/release area) in September 2019, and exceedances were identified for benzene, uranium, sulfate, TDS, total phenols, and dissolved manganese. Subsequent sampling at MW-2 (upgradient) conducted in March 2020 reported sulfate and TDS concentrations consistent with naturally occurring background concentrations and with concentrations in MW-1.

The remaining contaminants of concern in the dissolved phase are dissolved manganese, phenols, and benzene. To assess natural attenuation of VOCs at the site, AES performed Mann-Kendall analyses for two different time frames for BTEX concentrations in MW-1: 2009-2023 (the entire history of the monitor well) and 2019-2023 (the most recent set of consistent quarterly monitoring events). The Mann-Kendall analyses were run using ProUCL 5.2.0, a software package developed by U.S. Environmental Protection Agency for statistical analysis of data generated at Superfund sites, using a confidence coefficient of 0.95. Each trend (for a specific contaminant at a specific well) is categorized as "Increasing", "Decreasing", or "No Trend". The results of these trend analyses are summarized in the following table.

Mann-Kendall Trend Analyses for BTEX Concentrations at MW-1

Analyte	*Time Period*	
	2009-2023	*2019-2023*
Benzene	**No Trend**	**No Trend**
Toluene	**No Trend**	**No Trend**
Ethylbenzene	**Decreasing**	**No Trend**
Total Xylenes	**No Trend**	**Decreasing**

Overall, BTEX concentrations demonstrate "No Trend" over both time periods, with the exceptions of ethylbenzene from 2009 to 2023 and total xylenes from 2019 to 2023, which both demonstrate "Decreasing" trends. Benzene concentrations at MW-1 since 2019 are presented in Graph 1.

4.0 Conclusions and Recommendations

4.1 Conclusions

On March 15, June 21, September 13, and December 13, 2023, groundwater samples were collected from MW-1 (source area well). Groundwater samples were also collected from MW-5 in June 2023. Groundwater gauging occurred at other site wells to assist in calculating hydraulic gradient.

Based on field observations, field screening, and laboratory analytical results from March through December 2023, the following is concluded:

1. Depth to groundwater at the site was near record lows in September 2023 and then rebounded slightly in December 2023. December 2023 depths to groundwater ranged from 30.04 ft bgs at MW-4 to 31.78 ft bgs at MW-5. The groundwater gradient varied between quarters from southwest to west and was essentially flat in December 2023. Historic groundwater gradient has been in a southwestern direction.

2. Residual NAPL was observed in MW-1 as a sheen in March, September, and December 2023. A measurable NAPL thickness of 0.01 ft was recorded in MW-1 in June 2023. NAPL was effectively bailed off to a sheen during each of these sampling events, and samples were collected in from MW-1. Note that an oleophilic/hydrophobic absorbent sock installed in June 2020 continues to be utilized in MW-1; these absorbent socks function only to adsorb residual NAPL from the well. No other compounds are introduced into the shallow aquifer through the use of an absorbent sock. Samples were also collected from MW-5 in June 2023 for analysis of dissolved manganese and phenols.

3. MW-1 exceeded the WQCC standard of 5 µg/L for benzene with 430 µg/L in March, 250 µg/L in September, and 300 µg/L in December. Note that MW-1 was sampled on an annual basis for dissolved manganese and phenols in June 2023. Mann-Kendall analyses demonstrated that overall, BTEX concentrations at MW-1 are experiencing slow rates of natural attenuation.

4. MW-1 continues to exceed the dissolved phase manganese WQCC standard, with the most recent concentration reported at 0.26 mg/L. MW-1 also exceeded the WQCC standard for phenols with 3.1 mg/L, sulfate with 1,700 mg/L, and TDS with 3,120 mg/L. However, TDS and sulfate concentrations are also at elevated concentrations in upgradient MW-2, indicating that these parameters are present as elevated background concentrations across the area.

4.2 Recommendations

Based on groundwater concentrations above WQCC standards, AES recommends continued groundwater monitoring and sampling in **MW-1** for:

1. Quarterly: VOCs (USEPA Method 8260);
2. Annual: Phenols (SW-846 9067) and dissolved manganese (USEPA Method 200.7) – to be conducted in September 2024.
3. Gauge all wells for depth to groundwater and water quality parameters on an annual basis (September 2024).
4. Replace absorbent sock in MW-1 as needed.

AES on behalf of BMG plans to submit an Abatement Plan Amendment in Spring 2024 to propose additional mitigation efforts for this site.

If you have any questions regarding this report or site conditions, please do not hesitate to contact Angela Todd at (720) 537-6650 or Elizabeth McNally at (505) 564-2281.

Respectfully Submitted,

Lany Cupps

Lany Cupps
Environmental Coordinator

Angela Todd

Angela Todd, CHMM, PMP
Senior Project Manager

Elizabeth McNally, P.E.
Principal

Tables

1. Summary of Groundwater Measurement and Water Quality Data
2. Summary of Groundwater Analytical Results – VOCs and TPH
3. Summary of Groundwater Analytical Results - WQCC Groundwater Standards

Figures

1. Topographic Site Location Map
2. Aerial Site Map

3A. General Site Map and Groundwater Gradient Map, March 2023
3B. General Site Map and Groundwater Gradient Map, June 2023
3C. General Site Map and Groundwater Gradient Map, September 2023
3D. General Site Map and Groundwater Gradient Map, December 2023

4. Groundwater Contaminant Concentrations, 2023

Graphs

1. Dissolved Phase Benzene and Groundwater Elevations Over Time – MW-1

Appendices

A. Groundwater Sample Collection Forms (March, June, September, and December 2023)
B. Laboratory Analytical Reports (Hall No. 2303A32, 2303953, 2303950, 2306C91, 2309856, and Eurofins No. 2312921)
C. Mann-Kendall Trend Analyses Outputs

Cc: Zach Stradling (*zstradling@bmgdrilling.com*)
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Craig Schmitz, Private Landowner (hard copy)
#70 County Road 405
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Tables

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-1	05-Mar-09	7064.66		27.95		7036.71		12.29	5.231	1.27	6.64	-36.1
MW-1	11-Sep-09	7064.66		28.66		7036.00		13.15	7.016	0.65	8.60	-118.5
MW-1	15-Jan-10	7064.66		28.91		7035.75		13.30	3.714	2.74	6.79	-167.8
MW-1	15-Oct-10	7064.66		29.20		7035.46		13.77	4.642	1.51	7.14	-17.9
MW-1	21-Jan-11	7064.66		29.28		7035.38		12.42	4.246	1.63	6.92	-85.8
MW-1	12-May-11	7064.66		28.93		7035.73		13.08	3.830	2.95	7.00	-96.1
MW-1	12-Aug-11	7064.66		29.67		7034.99		14.03	4.637	3.83	6.94	-107.9
MW-1	16-Nov-11	7064.66		29.82		7034.84		11.57	4.385	2.89	5.35	-69.7
MW-1	21-Feb-12	7064.66		29.77		7034.89		12.01	4.063	1.09	6.78	-123.9
MW-1	24-May-12	7064.66		29.77		7034.89		12.94	4.563	1.04	6.95	-46.5
MW-1	10-Sep-12	7064.66		30.14		7034.52		14.63	4.705	1.16	7.12	-15.7
MW-1	04-Dec-12	7064.66		30.33		7034.33		12.55	4.430	1.30	7.11	-7.1
MW-1	26-Mar-13	7064.66		29.87		7034.79		12.20	4.556	1.66	6.72	-5.9
MW-1	01-Jul-13	7064.66		30.41		7034.25		13.52	4.372	3.61	7.18	9.2
MW-1	25-Sep-13	7064.66		29.51		7035.15		12.62	8.264	1.64	7.21	-48.6
MW-1	14-Jan-14	7064.66		30.10		7034.56		12.78	4.905	1.75	NM	-59.5
MW-1	04-Apr-14	7064.66	29.84	31.02	1.18	7033.64	7034.67	Not Measured - NAPL Present (1.18 ft thickness)				
MW-1	26-Sep-14	7064.66	30.25	30.90	0.65	7033.76	7034.33	Not Measured - NAPL Present (0.65 ft thickness)				
MW-1	03-Dec-14	7064.66	30.31	31.47	1.16	7033.19	7034.20	Not Measured - NAPL Present (1.16 ft thickness)				
MW-1	27-Mar-15	7064.66	29.35	29.63	0.28	7035.03	7035.27	Not Measured - NAPL Present (0.28 ft thickness)				
MW-1	08-Dec-15	7064.66	29.84	31.48	1.64	7033.18	7034.61	Not Measured - NAPL Present (1.64 ft thickness)				
MW-1	02-Jun-16	7064.66	29.56	31.21	1.65	7033.45	7034.89	Not Measured - NAPL Present (1.65 ft thickness)				
MW-1	20-Oct-16	7064.66	30.20	30.94	0.74	7033.72	7034.36	Not Measured - NAPL Present (0.74 ft thickness)				
MW-1	26-Jan-17	7064.66	29.77	30.38	0.61	7034.28	7034.81	Not Measured - NAPL Present (0.61 ft thickness)				
MW-1	14-Apr-17	7064.66	29.46	29.73	0.27	7034.93	7035.16	Not Measured - NAPL Present (0.27 ft thickness)				
MW-1	14-Aug-17	7064.66	30.08	31.30	1.22	7033.36	7034.42	Not Measured - NAPL Present (1.22 ft thickness)				
MW-1	28-Sep-17	7064.66	30.43	31.65	1.22	7033.01	7034.07	Not Measured - NAPL Present (1.22 ft thickness)				

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-1	07-Dec-17	7064.66	30.01	30.39	0.38	7034.27	7034.60	Not Measured - NAPL Present (0.38 ft thickness)				
MW-1	09-Jan-18	7064.66	30.12	30.55	0.43	7034.11	7034.48	Not Measured - NAPL Present (0.43 ft thickness)				
MW-1	12-Feb-18	7064.66	30.07	30.44	0.37	7034.22	7034.54	Not Measured - NAPL Present (0.37 ft thickness)				
MW-1	05-Mar-18	7064.66	30.12	30.31	0.19	7034.35	7034.52	Not Measured - NAPL Present (0.19 ft thickness)				
MW-1	05-Apr-18	7064.66	30.13	30.30	0.17	7034.36	7034.51	Not Measured - NAPL Present (0.17 ft thickness)				
MW-1	18-May-18	7064.66	30.18	30.38	0.20	7034.28	7034.45	Not Measured - NAPL Present (0.20 ft thickness)				
MW-1	12-Jun-18	7064.66	30.34	31.06	0.72	7033.60	7034.23	Not Measured - NAPL Present (0.72 ft thickness)				
MW-1	09-Jul-18	7064.66	30.60	30.97	0.37	7033.69	7034.01	Not Measured - NAPL Present (0.37 ft thickness)				
MW-1	13-Aug-18	7064.66	30.73	31.18	0.45	7033.48	7033.87	Not Measured - NAPL Present (0.45 ft thickness)				
MW-1	24-Sep-18	7064.66	30.99	31.31	0.32	7033.35	7033.63	Not Measured - NAPL Present (0.32 ft thickness)				
MW-1	26-Oct-18	7064.66	31.04	31.17	0.13	7033.49	7033.60	Not Measured - NAPL Present (0.13 ft thickness)				
MW-1	19-Nov-18	7064.66	31.05	31.13	0.08	7033.53	7033.60	Not Measured - NAPL Present (0.08 ft thickness)				
MW-1	14-Dec-18	7064.66	31.04	31.08	0.04	7033.58	7033.61	Not Measured - NAPL Present (0.04 ft thickness)				
MW-1	15-Jan-19	7064.66		29.90		7034.76		NM	NM	NM	NM	NM
MW-1	26-Mar-19	7064.66	29.52	29.53	0.01	7035.13	7035.14	13.7	3.297	1.16	7.44	-25.3
MW-1	25-Sep-19	7064.66	30.91	30.99	0.08	7033.67	7033.74	Not Measured - NAPL Present (0.08 ft thickness)				
MW-1	25-Mar-20	7064.66	30.35	30.36	0.01	7034.30	7034.31	Not Measured - NAPL Present (0.01 ft thickness)				
MW-1	23-Jun-20	7064.66	30.94	30.97	0.03	7033.69	7033.72	Not Measured - NAPL Present (0.03 ft thickness)				
MW-1	23-Sep-20	7064.66	31.45	31.50	0.05	7033.16	7033.20	Not Measured - NAPL Present (0.05 ft thickness)				
MW-1	23-Nov-20	7064.66	31.51	31.53	0.02	7033.13	7033.15	Not Measured - NAPL Present (0.02 ft thickness)				
MW-1	17-Mar-21	7064.66		31.44		7033.22	7033.22	Not Measured - NAPL Present (sheen)				
MW-1	17-Jun-21	7064.66	31.71	31.72	0.01	7032.94	7032.95	Not Measured - NAPL Present (0.01 ft thickness)				
MW-1	29-Sep-21	7064.66	32.07	32.09	0.02	7032.57	7032.59	Not Measured - NAPL Present (0.02 ft thickness)				
MW-1	14-Dec-21	7064.66	32.00	32.01	0.01	7032.65	7032.66	Not Measured - NAPL Present (0.01 ft thickness)				
MW-1	08-Mar-22	7064.66	30.41	30.42	0.01	7034.24	7034.25	Not Measured - NAPL Present (0.01 ft thickness)				
MW-1	09-Jun-22	7064.66		31.99		7032.67	7032.67	Not Measured - NAPL Present (sheen)				
MW-1	28-Sep-22	7064.66		30.58		7034.08	7034.08	Not Measured - NAPL Present (sheen)				

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-1	01-Dec-22	7064.66		31.51		7033.15	7033.15	Not Measured - NAPL Present (sheen)				
MW-1	15-Mar-23	7064.66		29.91		7034.75	7034.75	Not Measured - NAPL Present (sheen)				
MW-1	21-Jun-23	7064.66	30.71	30.72	0.01	7033.94	7033.95	Not Measured - NAPL Present (0.01 ft thickness)				
MW-1	13-Sep-23	7064.66		31.69		7032.97	7032.97	Not Measured - NAPL Present (sheen)				
MW-1	13-Dec-23	7064.66		31.64		7033.02	7033.02	Not Measured - NAPL Present (sheen)				
MW-2	05-Mar-09	7064.65		27.69		7036.96		12.00	4.567	2.59	6.82	-29.8
MW-2	10-Sep-09	7064.65		28.38		7036.27		12.93	6.480	1.09	7.58	62.2
MW-2	15-Jan-10	7064.65		28.62		7036.03		12.49	3.604	2.10	7.57	-70.3
MW-2	14-Oct-10	7064.65		28.91		7035.74		12.49	3.968	1.71	7.40	98.9
MW-2	21-Jan-11	7064.65		28.99		7035.66		11.44	4.045	1.62	8.56	-6.2
MW-2	12-May-11	7064.65		28.63		7036.02		13.14	4.087	1.43	7.67	-66.7
MW-2	12-Aug-11	7064.65		29.37		7035.28		14.08	4.102	4.36	7.09	160.2
MW-2	16-Nov-11	7064.65		29.52		7035.13		11.60	4.021	2.48	7.51	176.2
MW-2	21-Feb-12	7064.65		29.46		7035.19		NM	NM	NM	NM	NM
MW-2	24-May-12	7064.65		29.47		7035.18		NM	NM	NM	NM	NM
MW-2	10-Sep-12	7064.65		29.84		7034.81		NM	NM	NM	NM	NM
MW-2	04-Dec-12	7064.65		30.03		7034.62		NM	NM	NM	NM	NM
MW-2	26-Mar-13	7064.65		29.60		7035.05		NM	NM	NM	NM	NM
MW-2	27-Jun-13	7064.65		30.11		7034.54		NM	NM	NM	NM	NM
MW-2	25-Sep-13	7064.65		29.28		7035.37		NM	NM	NM	NM	NM
MW-2	14-Jan-14	7064.65		29.81		7034.84		NM	NM	NM	NM	NM
MW-2	04-Apr-14	7064.65		29.84		7034.81		NM	NM	NM	NM	NM
MW-2	10-Sep-14	7064.65		29.88		7034.77		NM	NM	NM	NM	NM
MW-2	03-Dec-14	7064.65		30.24		7034.41		NM	NM	NM	NM	NM
MW-2	27-Mar-15	7064.65		29.16		7035.49		NM	NM	NM	NM	NM
MW-2	08-Dec-15	7064.65		29.90		7034.75		NM	NM	NM	NM	NM

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BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-2	02-Jun-16	7064.65		29.57		7035.08		NM	NM	NM	NM	NM
MW-2	20-Oct-16	7064.65		30.02		7034.63		NM	NM	NM	NM	NM
MW-2	26-Jan-17	7064.65		29.61		7035.04		NM	NM	NM	NM	NM
MW-2	14-Apr-17	7064.65		29.23		7035.42		NM	NM	NM	NM	NM
MW-2	14-Aug-17	7064.65		30.01		7034.64		12.91	3.907	2.22	7.31	168.4
MW-2	26-Mar-19	7064.65		29.29		7035.36		NM	NM	NM	NM	NM
MW-2	25-Sep-19	7064.65		30.66		7033.99		NM	NM	NM	NM	NM
MW-2	25-Mar-20	7064.65		30.04		7034.61		12.2	3.78	1.33	7.17	156.6
MW-2	23-Jun-20	7064.65		30.65		7034.00		13.1	3.76	1.02	7.24	149.7
MW-2	23-Sep-20	7064.65		31.16		7033.49		NM	NM	NM	NM	NM
MW-2	23-Nov-20	7064.65		31.25		7033.40		NM	NM	NM	NM	NM
MW-2	17-Mar-21	7064.65		31.12		7033.53		NM	NM	NM	NM	NM
MW-2	17-Jun-21	7064.65		31.38		7033.27		NM	NM	NM	NM	NM
MW-2	29-Sep-21	7064.65		31.76		7032.89		13.4	2.892	0.69	7.47	225.4
MW-2	14-Dec-21	7064.65		32.4		7032.25		NM	NM	NM	NM	NM
MW-2	08-Mar-22	7064.65		34.14		7030.51		12.4	3.437	8.0	7.2	168.2
MW-2	09-Jun-22	7064.65		31.72		7032.93		13.6	2.936	1.2	7.2	134.6
MW-2	28-Sep-22	7064.65		30.34		7034.31		14.6	3.048	2.0	7.2	215.1
MW-2	21-Dec-22	7064.65		21.02		7043.63		NM	NM	NM	NM	NM
MW-2	15-Mar-23	7064.65		29.68		7034.97		NM	NM	NM	NM	NM
MW-2	21-Jun-23	7064.65		30.39		7034.26		NM	NM	NM	NM	NM
MW-2	13-Sep-23	7064.65		31.56		7033.09		NM	NM	NM	NM	NM
MW-2	13-Dec-23	7064.65		31.32		7033.33		NM	NM	NM	NM	NM
MW-3	05-Mar-09	7064.01		27.16		7036.85		12.29	4.310	2.17	6.66	-28.2
MW-3	11-Sep-09	7064.01		27.99		7036.02		13.50	6.080	0.53	9.43	-163.6
MW-3	15-Jan-10	7064.01		28.22		7035.79		11.99	3.607	1.85	7.27	-222.5

TABLE 1
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BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-3	14-Oct-10	7064.01		28.54		7035.47		12.41	4.180	1.46	7.24	-53.1
MW-3	21-Jan-11	7064.01		28.60		7035.41		11.92	4.224	1.60	7.20	-122.5
MW-3	12-May-11	7064.01		28.21		7035.80		12.56	4.172	2.25	7.28	-145.8
MW-3	12-Aug-11	7064.01		29.02		7034.99		13.32	4.372	2.35	7.17	-158.5
MW-3	16-Nov-11	7064.01		29.14		7034.87		10.87	4.326	2.17	6.53	-105.7
MW-3	21-Feb-12	7064.01		29.07		7034.94		11.36	4.481	1.01	7.09	-118.0
MW-3	24-May-12	7064.01		29.09		7034.92		13.30	4.325	0.81	7.07	-70.3
MW-3	10-Sep-12	7064.01		29.45		7034.56		13.26	4.377	2.49	7.23	-42.7
MW-3	04-Dec-12	7064.01		29.65		7034.36		12.08	4.294	0.69	7.26	-46.8
MW-3	26-Mar-13	7064.01		29.12		7034.89		11.93	2.337	5.85	7.46	59.3
MW-3	01-Jul-13	7064.01		29.74		7034.27		14.64	4.119	11.22	7.69	-36.8
MW-3	25-Sep-13	7064.01		28.65		7035.36		12.50	7.764	2.08	7.22	-79.5
MW-3	14-Jan-14	7064.01		29.38		7034.63		12.23	4.764	1.74	NM	-59.9
MW-3	10-Sep-14	7064.01		29.39		7034.62		NM	NM	NM	NM	NM
MW-3	26-Sep-14	7064.01		13.68		7050.33		12.88	2.718	2.69	7.11	27.2
MW-3	03-Dec-14	7064.01		29.83		7034.18		NM	NM	NM	NM	NM
MW-3	27-Mar-15	7064.01		28.60		7035.41		NM	NM	NM	NM	NM
MW-3	08-Dec-15	7064.01		29.45		7034.56		NM	NM	NM	NM	NM
MW-3	02-Jun-16	7064.01		29.15		7034.86		12.71	4.064	1.58	7.08	-3.2
MW-3	20-Oct-16	7064.01		29.60		7034.41		NM	NM	NM	NM	NM
MW-3	26-Jan-17	7064.01		29.09		7034.92		11.19	4.024	1.90	7.18	11.5
MW-3	14-Apr-17	7064.01		28.70		7035.31		NM	NM	NM	NM	NM
MW-3	14-Aug-17	7064.01		29.57		7034.44		12.79	4.041	2.09	7.22	33.6
MW-3	26-Mar-19	7064.01		28.64		7035.37		NM	NM	NM	NM	NM
MW-3	25-Sep-19	7064.01		30.23		7033.78		NM	NM	NM	NM	NM
MW-3	25-Mar-20	7064.01		29.56		7034.45		NM	NM	NM	NM	NM
MW-3	23-Jun-20	7064.01		30.26		7033.75		NM	NM	NM	NM	NM

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-3	23-Sep-20	7064.01		30.78		7033.23		NM	NM	NM	NM	NM
MW-3	23-Nov-20	7064.01		30.84		7033.17		NM	NM	NM	NM	NM
MW-3	17-Mar-21	7064.01		30.71		7033.30		NM	NM	NM	NM	NM
MW-3	17-Jun-21	7064.01		30.99		7033.02		NM	NM	NM	NM	NM
MW-3	29-Sep-21	7064.01		31.38		7032.63		12.9	2.847	0.57	7.18	217.6
MW-3	14-Dec-21	7064.01		32.5		7031.51		NM	NM	NM	NM	NM
MW-3	08-Mar-22	7064.01		30.60		7033.41		12.2	3.209	13.0	7.0	34.6
MW-3	09-Jun-22	7064.01		31.31		7032.70		14.3	2.809	1.37	7.2	31.5
MW-3	28-Sep-22	7064.01		29.58		7034.43		14.30	2.805	1.34	7.06	77.5
MW-3	21-Dec-22	7064.01		30.59		7033.42		NM	NM	NM	NM	NM
MW-3	15-Mar-23	7064.01		28.84		7035.17		NM	NM	NM	NM	NM
MW-3	21-Jun-23	7064.01		29.96		7034.05		NM	NM	NM	NM	NM
MW-3	13-Sep-23	7064.01		30.48		7033.53		NM	NM	NM	NM	NM
MW-3	13-Dec-23	7064.01		30.89		7033.12		NM	NM	NM	NM	NM
MW-4	05-Mar-09	7063.72		27.39		7036.33		12.36	4.760	1.72	6.58	-29.2
MW-4	06-Apr-09	7063.72		27.58		7036.14		11.87	4.599	2.06	6.75	18.0
MW-4	10-Sep-09	7063.72		28.12		7035.60		13.09	6.337	0.81	6.98	54.6
MW-4	15-Jan-10	7063.72		28.34		7035.38		11.65	3.812	2.78	7.20	-125.1
MW-4	15-Oct-10	7063.72		28.64		7035.08		12.52	4.491	1.42	7.13	42.8
MW-4	21-Jan-11	7063.72		28.72		7035.00		11.90	4.748	1.14	7.19	5.4
MW-4	12-May-11	7063.72		28.39		7035.33		13.11	4.576	2.58	7.29	-25.8
MW-4	12-Aug-11	7063.72		29.10		7034.62		13.89	4.759	3.98	6.85	74.9
MW-4	16-Nov-11	7063.72		29.26		7034.46		11.66	4.725	2.15	7.11	153.0
MW-4	21-Feb-12	7063.72		29.22		7034.50		10.27	4.927	1.02	7.02	-11.3
MW-4	24-May-12	7063.72		29.23		7034.49		13.75	4.687	1.04	6.98	39.3
MW-4	10-Sep-12	7063.72		29.58		7034.14		NM	NM	NM	NM	NM

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BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-4	04-Dec-12	7063.72		29.77		7033.95		NM	NM	NM	NM	NM
MW-4	26-Mar-13	7063.72		29.33		7034.39		NM	NM	NM	NM	NM
MW-4	27-Jun-13	7063.72		29.85		7033.87		NM	NM	NM	NM	NM
MW-4	25-Sep-13	7063.72		28.96		7034.76		NM	NM	NM	NM	NM
MW-4	14-Jan-14	7063.72		29.54		7034.18		NM	NM	NM	NM	NM
MW-4	04-Apr-14	7063.72		29.54		7034.18		12.16	0.435	2.86	6.90	89.4
MW-4	10-Sep-14	7063.72		29.60		7034.12		NM	NM	NM	NM	NM
MW-4	03-Dec-14	7063.72		29.97		7033.75		NM	NM	NM	NM	NM
MW-4	27-Mar-15	7063.72		28.89		7034.83		NM	NM	NM	NM	NM
MW-4	08-Dec-15	7063.72		29.58		7034.14		NM	NM	NM	NM	NM
MW-4	02-Jun-16	7063.72		29.28		7034.44		NM	NM	NM	NM	NM
MW-4	20-Oct-16	7063.72		29.71		7034.01		NM	NM	NM	NM	NM
MW-4	26-Jan-17	7063.72		29.28		7034.44		NM	NM	NM	NM	NM
MW-4	14-Apr-17	7063.72		28.92		7034.80		NM	NM	NM	NM	NM
MW-4	14-Aug-17	7063.72		29.69		7034.03		13.07	4.219	1.98	7.17	109.7
MW-4	26-Mar-19	7063.72		28.99		7034.73		NM	NM	NM	NM	NM
MW-4	25-Sep-19	7063.72		30.35		7033.37		NM	NM	NM	NM	NM
MW-4	25-Mar-20	7063.72		29.78		7033.94		NM	NM	NM	NM	NM
MW-4	23-Jun-20	7063.72		30.39		7033.33		NM	NM	NM	NM	NM
MW-4	23-Sep-20	7063.72		30.88		7032.84		NM	NM	NM	NM	NM
MW-4	23-Nov-20	7063.72		30.95		7032.77		NM	NM	NM	NM	NM
MW-4	17-Mar-21	7063.72		30.88		7032.84		NM	NM	NM	NM	NM
MW-4	17-Jun-21	7063.72		31.10		7032.62		NM	NM	NM	NM	NM
MW-4	29-Sep-21	7063.72		31.47		7032.25		13.2	3.137	1.30	7.13	191.7
MW-4	14-Dec-21	7063.72		32.5		7031.22		NM	NM	NM	NM	NM
MW-4	08-Mar-22	7063.72		30.86		7032.86		12.3	3.635	9.0	7.0	102.8
MW-4	09-Jun-22	7063.72		31.44		7032.28		13.5	3.067	2.6	7.29	108.8

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-4	28-Sep-22	7063.72		30.02		7033.70		14.6	3.008	1.32	7.1	118.6
MW-4	21-Dec-22	7063.72		30.74		7032.98		NM	NM	NM	NM	NM
MW-4	15-Mar-23	7063.72		29.36		7034.36		NM	NM	NM	NM	NM
MW-4	21-Jun-23	7063.72		30.18		7033.54		NM	NM	NM	NM	NM
MW-4	13-Sep-23	7063.72		31.91		7031.81		NM	NM	NM	NM	NM
MW-4	13-Dec-23	7063.72		30.04		7033.68		NM	NM	NM	NM	NM
MW-5	05-Mar-09	7064.79		28.24		7036.55		11.80	6.088	3.89	6.61	-17.3
MW-5	10-Sep-09	7064.79		28.87		7035.92		12.78	7.785	1.22	7.09	60.5
MW-5	15-Jan-10	7064.79		29.10		7035.69		11.19	4.288	1.93	7.27	-85.8
MW-5	14-Oct-10	7064.79		29.38		7035.41		12.34	4.725	1.24	7.23	98.1
MW-5	21-Jan-11	7064.79		29.47		7035.32		11.93	5.038	2.71	7.31	103.9
MW-5	12-May-11	7064.79		29.17		7035.62		12.40	4.957	2.44	7.42	-44.4
MW-5	12-Aug-11	7064.79		29.84		7034.95		13.73	4.968	3.87	6.83	189.8
MW-5	16-Nov-11	7064.79		30.00		7034.79		11.16	4.814	4.47	7.18	290.4
MW-5	21-Feb-12	7064.79		29.96		7034.83		NM	NM	NM	NM	NM
MW-5	25-May-12	7064.79		29.96		7034.83		NM	NM	NM	NM	NM
MW-5	10-Sep-12	7064.79		30.31		7034.48		NM	NM	NM	NM	NM
MW-5	04-Dec-12	7064.79		30.52		7034.27		NM	NM	NM	NM	NM
MW-5	26-Mar-13	7064.79		30.14		7034.65		NM	NM	NM	NM	NM
MW-5	27-Jun-13	7064.79		30.60		7034.19		NM	NM	NM	NM	NM
MW-5	25-Sep-13	7064.79		29.87		7034.92		NM	NM	NM	NM	NM
MW-5	14-Jan-14	7064.79		30.31		7034.48		NM	NM	NM	NM	NM
MW-5	04-Apr-14	7064.79		30.30		7034.49		NM	NM	NM	NM	NM
MW-5	10-Sep-14	7064.79		30.37		7034.42		NM	NM	NM	NM	NM
MW-5	03-Dec-14	7064.79		30.70		7034.09		NM	NM	NM	NM	NM
MW-5	27-Mar-15	7064.79		29.72		7035.07		NM	NM	NM	NM	NM

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-5	08-Dec-15	7064.79		30.36		7034.43		NM	NM	NM	NM	NM
MW-5	02-Jun-16	7064.79		30.03		7034.76		NM	NM	NM	NM	NM
MW-5	20-Oct-16	7064.79		30.47		7034.32		NM	NM	NM	NM	NM
MW-5	26-Jan-17	7064.79		30.10		7034.69		NM	NM	NM	NM	NM
MW-5	14-Aug-17	7064.79		30.45		7034.34		Unable to sample - well obstructed				
MW-5	26-Mar-19	7064.79		29.89		7034.90		NM	NM	NM	NM	NM
MW-5	25-Sep-19	7064.79		31.06		7033.73		NM - Well Casing Damaged				
MW-5	25-Mar-20	7064.79		30.56		7034.23		NM - Well Casing Damaged				
MW-5	23-Jun-20	7064.79		31.09		7033.70		NM - Well Casing Damaged				
MW-5	23-Sep-20	7064.79		31.58		7033.21		NM	NM	NM	NM	NM
MW-5	23-Nov-20	7064.79		31.66		7033.13		NM	NM	NM	NM	NM
MW-5	17-Mar-21	7064.79		31.60		7033.19		NM	NM	NM	NM	NM
MW-5	17-Jun-21	7064.79		31.81		7032.98		NM	NM	NM	NM	NM
MW-5	29-Sep-21	7064.79		32.17		7032.62		NM - Well Casing Damaged				
MW-5	14-Dec-21	7064.79		NM		--		NM - Well Casing Damaged				
MW-5	08-Mar-22	7064.79		31.67		7033.12		NM - Well Casing Damaged				
MW-5	09-Jun-22	7064.79		32.16		7032.63		NM - Well Casing Damaged				
MW-5	28-Sep-22	7064.79		30.99		7033.80		NM - Well Casing Damaged				
MW-5	21-Dec-22	7064.79		31.51		7033.28		NM - Well Casing Damaged				
MW-5	15-Mar-23	7064.79		30.39		7034.40		NM - Well Casing Damaged				
MW-5	21-Jun-23	7064.79		30.91		7033.88		13.4	4.411	3.9	7.2	22.8
MW-5	13-Sep-23	7064.79		31.01		7033.78		NM	NM	NM	NM	NM
MW-5	13-Dec-23	7064.79		31.78		7033.01		NM	NM	NM	NM	NM
MW-6	05-Mar-09	7049.54		12.67		7036.87		9.21	4.967	4.30	6.53	4.6
MW-6	10-Sep-09	7049.54		13.90		7035.64		11.85	6.287	1.15	7.12	75.9
MW-6	15-Jan-10	7049.54		14.02		7035.52		10.81	3.789	2.46	7.35	-66.7

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-6	15-Oct-10	7049.54		14.39		7035.15		12.45	4.353	1.40	7.24	20.7
MW-6	21-Jan-11	7049.54		14.42		7035.12		11.59	4.516	3.10	7.32	-37.3
MW-6	12-May-11	7049.54		14.00		7035.54		10.69	4.349	1.89	7.47	-24.9
MW-6	12-Aug-11	7049.54		14.93		7034.61		11.99	4.492	4.24	7.56	0.2
MW-6	16-Nov-11	7049.54		14.99		7034.55		12.01	4.398	2.74	6.46	182.1
MW-6	21-Feb-12	7049.54		14.90		7034.64		NM	NM	NM	NM	NM
MW-6	25-May-12	7049.54		14.92		7034.62		NM	NM	NM	NM	NM
MW-6	10-Sep-12	7049.54		NM		NM		NM - Well is Dry				
MW-6	04-Dec-12	7049.54		15.48		7034.06		NM	NM	NM	NM	NM
MW-6	26-Mar-13	7049.54		14.79		7034.75		NM	NM	NM	NM	NM
MW-6	27-Jun-13	7049.54		15.60		7033.94		NM	NM	NM	NM	NM
MW-6	25-Sep-13	7049.54		14.92		7034.62		NM	NM	NM	NM	NM
MW-6	14-Jan-14	7049.54		15.17		7034.37		NM	NM	NM	NM	NM
MW-6	04-Apr-14	7049.54		15.20		7034.34		NM	NM	NM	NM	NM
MW-6	10-Sep-14	7049.54		15.06		7034.48		NM	NM	NM	NM	NM
MW-6	03-Dec-14	7049.54		15.66		7033.88		NM	NM	NM	NM	NM
MW-6	27-Mar-15	7049.54		14.09		7035.45		NM	NM	NM	NM	NM
MW-6	08-Dec-15	7049.54		15.21		7034.33		NM	NM	NM	NM	NM
MW-6	02-Jun-16	7049.54		14.92		7034.62		NM	NM	NM	NM	NM
MW-6	20-Oct-16	7049.54		15.41		7034.13		NM	NM	NM	NM	NM
MW-6	26-Jan-17	7049.54		14.69		7034.85		NM	NM	NM	NM	NM
MW-6	07-Aug-17	7064.10		Plugged and Abandoned								
MW-7	06-Mar-09	7062.80		26.34		7036.46		11.40	4.951	2.17	6.50	-3.3
MW-7	10-Sep-09	7062.80		27.23		7035.57		12.61	6.288	1.03	7.05	51.0
MW-7	15-Jan-10	7062.80		27.44		7035.36		11.02	3.820	2.92	7.27	-66.3
MW-7	14-Oct-10	7062.80		27.76		7035.04		12.79	4.047	1.24	7.19	68.6

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-7	21-Jan-11	7062.80		27.82		7034.98		10.79	4.205	2.22	7.37	42.0
MW-7	12-May-11	7062.80		27.46		7035.34		12.80	4.118	1.73	7.38	-70.4
MW-7	12-Aug-11	7062.80		28.24		7034.56		13.88	4.119	2.90	7.30	112.8
MW-7	16-Nov-11	7062.80		28.38		7034.42		11.24	4.077	2.75	6.32	168.0
MW-7	21-Feb-12	7062.80		28.31		7034.49		NM	NM	NM	NM	NM
MW-7	24-May-12	7062.80		28.34		7034.46		NM	NM	NM	NM	NM
MW-7	10-Sep-12	7062.80		28.69		7034.11		NM	NM	NM	NM	NM
MW-7	04-Dec-12	7062.80		28.86		7033.94		NM	NM	NM	NM	NM
MW-7	26-Mar-13	7062.80		28.33		7034.47		NM	NM	NM	NM	NM
MW-7	27-Jun-13	7062.80		28.97		7033.83		NM	NM	NM	NM	NM
MW-7	25-Sep-13	7062.80		27.78		7035.02		NM	NM	NM	NM	NM
MW-7	14-Jan-14	7062.80		28.61		7034.19		NM	NM	NM	NM	NM
MW-7	04-Apr-14	7062.80		28.62		7034.18		NM	NM	NM	NM	NM
MW-7	10-Sep-14	7062.80		28.58		7034.22		NM	NM	NM	NM	NM
MW-7	03-Dec-14	7062.80		29.02		7033.78		NM	NM	NM	NM	NM
MW-7	27-Mar-15	7062.80		27.76		7035.04		NM	NM	NM	NM	NM
MW-7	08-Dec-15	7062.80		28.62		7034.18		NM	NM	NM	NM	NM
MW-7	02-Jun-16	7062.80		28.34		7034.46		NM	NM	NM	NM	NM
MW-7	20-Oct-16	7062.80		28.79		7034.01		NM	NM	NM	NM	NM
MW-7	26-Jan-17	7062.80		28.24		7034.56		NM	NM	NM	NM	NM
MW-7	07-Aug-17	7064.10		Plugged and Abandoned								
MW-8	06-Mar-09	7063.27		27.49		7035.78		11.91	4.731	2.14	6.40	-4.4
MW-8	10-Sep-09	7063.27		28.14		7035.13		13.53	5.987	1.12	8.51	-93.2
MW-8	15-Jan-10	7063.27		28.39		7034.88		11.43	2.891	1.86	6.68	-162.2
MW-8	15-Oct-10	7063.27		28.70		7034.57		12.80	4.017	1.21	7.04	-39.1
MW-8	21-Jan-11	7063.27		28.80		7034.47		12.30	4.002	1.55	7.08	-91.2

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-8	12-May-11	7063.27		28.52		7034.75		13.16	3.966	1.60	7.16	-121.2
MW-8	12-Aug-11	7063.27		29.19		7034.08		13.85	4.194	3.45	6.97	-148.3
MW-8	16-Nov-11	7063.27		29.35		7033.92		11.49	4.218	2.57	6.49	-115.4
MW-8	21-Feb-12	7063.27		29.31		7033.96		12.21	4.500	0.88	6.96	-116.0
MW-8	24-May-12	7063.27		29.34		7033.93		13.43	4.402	0.65	6.93	-41.2
MW-8	10-Sep-12	7063.27		29.68		7033.59		12.98	4.499	1.34	7.12	-27.3
MW-8	04-Dec-12	7063.27		29.87		7033.40		12.53	3.045	3.78	7.13	-3.1
MW-8	26-Mar-13	7063.27		29.47		7033.80		12.65	4.449	4.10	6.95	22.0
MW-8	27-Jun-13	7063.27		29.97		7033.30		14.39	6.908	8.14	7.01	-43.6
MW-8	25-Sep-13	7063.27		29.14		7034.13		NM	NM	NM	NM	NM
MW-8	14-Jan-14	7063.27		29.65		7033.62		NM	NM	NM	NM	NM
MW-8	04-Apr-14	7063.27		29.64		7033.63		13.14	0.424	1.70	6.80	-14.9
MW-8	04-Apr-14	7063.27		29.68		7033.59		NM	NM	NM	NM	NM
MW-8	03-Dec-14	7063.27		30.00		7033.27		NM	NM	NM	NM	NM
MW-8	27-Mar-15	7063.27		29.02		7034.25		NM	NM	NM	NM	NM
MW-8	08-Dec-15	7063.27		29.59		7033.68		NM	NM	NM	NM	NM
MW-8	02-Jun-16	7063.27		29.31		7033.96		NM	NM	NM	NM	NM
MW-8	20-Oct-16	7063.27		29.72		7033.55		NM	NM	NM	NM	NM
MW-8	26-Jan-17	7063.27		29.33		7033.94		NM	NM	NM	NM	NM
MW-8	07-Aug-17	7064.10		Plugged and Abandoned								
MW-9	06-Mar-09	7062.60		27.60		7035.00		9.47	5.418	5.12	6.39	-1.8
MW-9	06-Apr-09	7062.60		27.74		7034.86		11.86	5.174	2.24	6.72	25.2
MW-9	10-Sep-09	7062.60		28.19		7034.41		13.10	7.257	0.86	7.03	-129.8
MW-9	15-Jan-10	7062.60		28.42		7034.18		10.89	3.960	2.29	7.13	-187.4
MW-9	15-Oct-10	7062.60		28.74		7033.86		12.85	4.561	1.89	7.17	-74.4
MW-9	21-Jan-11	7062.60		28.85		7033.75		12.67	4.452	1.34	7.16	-90.8
MW-9	12-May-11	7062.60		28.61		7033.99		13.12	4.120	2.31	7.28	-94.1

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-9	12-Aug-11	7062.60		29.22		7033.38		12.92	4.492	5.42	7.33	-132.7
MW-9	16-Nov-11	7062.60		29.41		7033.19		11.80	4.402	2.67	5.56	-75.1
MW-9	21-Feb-12	7062.60		29.39		7033.21		11.89	4.241	1.37	6.95	-127.0
MW-9	24-May-12	7062.60		29.39		7033.21		13.68	4.470	0.80	7.08	-56.4
MW-9	10-Sep-12	7062.60		29.73		7032.87		13.41	4.439	1.41	7.13	-52.2
MW-9	04-Dec-12	7062.60		29.90		7032.70		12.87	4.374	1.34	7.19	-60.5
MW-9	26-Mar-13	7062.60		29.56		7033.04		12.57	4.396	1.24	6.72	-15.8
MW-9	27-Jun-13	7062.60		30.00		7032.60		20.04	6.761	2.38	7.10	-48.5
MW-9	25-Sep-13	7062.60		29.28		7033.32		13.08	8.437	2.44	7.19	-84.6
MW-9	14-Jan-14	7062.60		29.68		7032.92		12.61	5.160	1.11	NM	-54.8
MW-9	04-Apr-14	7062.60		29.69		7032.91		12.89	0.407	2.81	6.89	-48.2
MW-9	10-Sep-14	7062.60		29.72		7032.88		NM	NM	NM	NM	NM
MW-9	03-Dec-14	7062.60		30.00		7032.60		NM	NM	NM	NM	NM
MW-9	27-Mar-15	7062.60		29.12		7033.48		NM	NM	NM	NM	NM
MW-9	08-Dec-15	7062.60		29.55		7033.05		NM	NM	NM	NM	NM
MW-9	02-Jun-16	7062.60		29.29		7033.31		NM	NM	NM	NM	NM
MW-9	20-Oct-16	7062.60		29.69		7032.91		NM	NM	NM	NM	NM
MW-9	26-Jan-17	7062.60		29.32		7033.28		NM	NM	NM	NM	NM
MW-9	07-Aug-17	7064.10		Plugged and Abandoned								
MW-10	09-Mar-09	7063.27		26.25		7037.02		10.51	4.572	3.44	6.62	15.6
MW-10	10-Sep-09	7063.27		27.10		7036.17		12.62	5.133	1.83	6.97	80.7
MW-10	15-Jan-10	7063.27		27.29		7035.98		10.82	3.210	2.47	7.10	-99.3
MW-10	14-Oct-10	7063.27		27.61		7035.66		11.98	3.811	1.80	7.22	119.2
MW-10	21-Jan-11	7063.27		27.66		7035.61		10.73	3.946	1.78	7.45	90.1
MW-10	12-May-11	7063.27		27.28		7035.99		12.26	3.839	1.34	7.26	84.9
MW-10	12-Aug-11	7063.27		28.08		7035.19		12.84	3.948	4.99	6.62	175.8

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)	Temp. (° C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-10	16-Nov-11	7063.27		28.20		7035.07		10.81	3.912	2.81	6.17	190.7
MW-10	21-Feb-12	7063.27		28.13		7035.14		NM	NM	NM	NM	NM
MW-10	24-May-12	7063.27		28.15		7035.12		NM	NM	NM	NM	NM
MW-10	10-Sep-12	7063.27		28.54		7034.73		NM	NM	NM	NM	NM
MW-10	04-Dec-12	7063.27		28.72		7034.55		NM	NM	NM	NM	NM
MW-10	26-Mar-13	7063.27		28.20		7035.07		NM	NM	NM	NM	NM
MW-10	27-Jun-13	7063.27		28.79		7034.48		NM	NM	NM	NM	NM
MW-10	25-Sep-13	7063.27		27.80		7035.47		NM	NM	NM	NM	NM
MW-10	14-Jan-14	7063.27		28.44		7034.83		NM	NM	NM	NM	NM
MW-10	04-Apr-14	7063.27		28.46		7034.81		NM	NM	NM	NM	NM
MW-10	10-Sep-14	7063.27		28.48		7034.79		NM	NM	NM	NM	NM
MW-10	03-Dec-14	7063.27		28.92		7034.35		NM	NM	NM	NM	NM
MW-10	27-Mar-15	7063.27		27.70		7035.57		NM	NM	NM	NM	NM
MW-10	08-Dec-15	7063.27		28.56		7034.71		NM	NM	NM	NM	NM
MW-10	02-Jun-16	7063.27		28.22		7035.05		NM	NM	NM	NM	NM
MW-10	20-Oct-16	7063.27		28.70		7034.57		NM	NM	NM	NM	NM
MW-10	26-Jan-17	7063.27		28.19		7035.08		NM	NM	NM	NM	NM
MW-10	07-Aug-17	7064.10		Plugged and Abandoned								
MW-11	09-Mar-09	7064.10		28.33		7035.77		11.47	5.730	3.52	6.63	17.1
MW-11	10-Sep-09	7064.10		28.88		7035.22		13.32	7.785	0.67	7.02	61.2
MW-11	15-Jan-10	7064.10		29.13		7034.97		10.20	3.995	1.86	7.16	-59.2
MW-11	14-Oct-10	7064.10		29.44		7034.66		13.00	4.901	1.93	7.20	94.5
MW-11	21-Jan-11	7064.10		29.53		7034.57		11.55	4.937	1.75	7.37	216.0
MW-11	12-May-11	7064.10		29.25		7034.85		12.97	4.701	2.71	7.41	-16.0
MW-11	12-Aug-11	7064.10		29.89		7034.21		12.89	4.872	3.24	7.39	122.2
MW-11	16-Nov-11	7064.10		30.07		7034.03		11.49	4.762	3.61	7.00	307.9

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba 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 GW Elev. (ft)*	*Temp. (° C)*	*Specific Conduct. (mS)*	*Dissolved Oxygen (mg/L)*	*pH*	*ORP (mV)*
MW-11	21-Feb-12	7064.10		30.04		7034.06		NM	NM	NM	NM	NM
MW-11	24-May-12	7064.10		30.06		7034.04		NM	NM	NM	NM	NM
MW-11	10-Sep-12	7064.10		30.38		7033.72		NM	NM	NM	NM	NM
MW-11	04-Dec-12	7064.10		30.58		7033.52		NM	NM	NM	NM	NM
MW-11	26-Mar-13	7064.10		30.23		7033.87		NM	NM	NM	NM	NM
MW-11	27-Jun-13	7064.10		30.66		7033.44		NM	NM	NM	NM	NM
MW-11	25-Sep-13	7064.10		30.00		7034.10		NM	NM	NM	NM	NM
MW-11	14-Jan-14	7064.10		30.39		7033.71		NM	NM	NM	NM	NM
MW-11	04-Apr-14	7064.10		30.36		7033.74		NM	NM	NM	NM	NM
MW-11	10-Sep-14	7064.10		30.42		7033.68		NM	NM	NM	NM	NM
MW-11	03-Dec-14	7064.10		30.73		7033.37		NM	NM	NM	NM	NM
MW-11	27-Mar-15	7064.10		29.83		7034.27		NM	NM	NM	NM	NM
MW-11	08-Dec-15	7064.10		30.34		7033.76		NM	NM	NM	NM	NM
MW-11	02-Jun-16	7064.10		30.04		7034.06		NM	NM	NM	NM	NM
MW-11	20-Oct-16	7064.10		30.45		7033.65		NM	NM	NM	NM	NM
MW-11	26-Jan-17	7064.10		30.10		7034.00		NM	NM	NM	NM	NM
MW-11	07-Aug-17	7064.10		Plugged and Abandoned								

NOTES: NA NOT AVAILABLE
NM NOT MEASURED

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -
VOLATILE ORGANICS AND PETROLEUM HYDROCARBONS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-GRO	TPH-DRO	TPH-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	8015B	8015B
New Mexico WQCC		*5*	*1,000*	*700*	*620*	*NE*	*NE*	*NE*
MW-1	05-Mar-09	**310**	91	5.1	200	2.1	<1.0	<5.0
MW-1	11-Sep-09	**1,500**	1.1	48	170	4.8	<1.0	<5.0
MW-1	15-Jan-10	**630**	<5.0	19	47	2.1	<1.0	<5.0
MW-1	15-Oct-10	**960**	53	37	94	4.1	<1.0	<5.0
MW-1	21-Jan-11	**3,600**	<10	140	160	10	<1.0	<5.0
MW-1	12-May-11	**7,800**	42	270	33	19	<1.0	<5.0
MW-1	12-Aug-11	**280**	<1.0	18	<2.0	1.2	<1.0	<5.0
MW-1	16-Nov-11	**2,700**	<5.0	76	<10	3.9	<1.0	<5.0
MW-1	21-Feb-12	**360**	<1.0	54	<2.0	1.2	<1.0	<5.0
MW-1	24-May-12	**210**	2.1	31	5.1	0.59	<1.0	<5.0
MW-1	10-Sep-12	**54**	<2.0	36	<4.0	0.45	<1.0	<5.0
MW-1	04-Dec-12	<2.0	<2.0	17	<4.0	0.19	<1.0	<5.0
MW-1	26-Mar-13	1.2	<1.0	1.8	<2.0	<0.050	<1.0	<5.0
MW-1	01-Jul-13	1.6	<1.0	6.5	<2.0	0.090	<1.0	<5.0
MW-1	25-Sep-13	**180**	2.9	36	8.8	0.53	<1.0	<5.0
MW-1	14-Jan-14	**14**	<2.0	15	<4.0	0.21	<1.0	<5.0
MW-1	NS - Residual NAPL Present April 2014 through December 2018							
MW-1	26-Mar-19	**340**	62	35	370	6.1	2.1	<5.0
MW-1	25-Sep-19	**88**	9.8	7.7	86	2.0	6.0	<5.0
MW-1	25-Mar-20	**220**	12	16	89	2.3	<1.0	<5.0
MW-1	23-Jun-20	**760**	17	45	280	7.7	<1.0	<5.0
MW-1	23-Sep-20	**9.7**	1.6	3.2	36	0.35	4.7	<5.0
MW-1	23-Nov-20	**110**	3.1	20	130	3.6	1.0	<5.0
MW-1	17-Mar-21	**160**	3.1	15	150	8.1	2.6	<5.0
MW-1	17-Jun-21	**14**	<2.0	<2.0	11	0.28	<1.0	<5.0
MW-1	29-Sep-21	**190**	<1.0	6.0	32	1.8	1.1	<5.0
MW-1	14-Dec-21	**54**	<2.0	2.2	10	NA	NA	NA
MW-1	08-Mar-22	**180**	<1.0	6.5	32	NA	NA	NA
MW-1	09-Jun-22	**76**	<1.0	4.4	3.0	NA	NA	NA
MW-1	28-Sep-22	**160**	4.3	6.6	39	NA	NA	NA
MW-1	21-Dec-22	**380**	<10	11	20	3.1	NA	NA
MW-1	15-Mar-23	**430**	6.4	<5.0	25	NA	NA	NA
MW-1	13-Sep-23	**250**	<10	11	15	NA	NA	NA
MW-1	13-Dec-23	**300**	<5.0	13	13	NA	NA	NA
MW-2	05-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -
VOLATILE ORGANICS AND PETROLEUM HYDROCARBONS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-GRO	TPH-DRO	TPH-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	8015B	8015B
New Mexico WQCC		*5*	*1,000*	*700*	*620*	*NE*	*NE*	*NE*
MW-2	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	14-Aug-17	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-3	05-Mar-09	**400**	**1,100**	110	**1,300**	8.2	3.4	<5.0
MW-3	11-Sep-09	**380**	27	26	61	4.2	9.6	6.0
MW-3	15-Jan-10	**750**	11	34	<20	3.4	7.0	6.1
MW-3	14-Oct-10	**140**	<1.0	6.8	2.8	0.76	1.9	<5.0
MW-3	21-Jan-11	**280**	<1.0	24	9.1	1.7	3.5	<5.0
MW-3	12-May-11	**980**	<1.0	42	<2.0	3.0	4.8	<5.0
MW-3	12-Aug-11	**51**	<1.0	4.2	<2.0	0.38	<1.0	<5.0
MW-3	16-Nov-11	**63**	<1.0	6.0	<2.0	0.46	3.3	<5.0
MW-3	21-Feb-12	4.8	<1.0	<1.0	<2.0	0.18	<1.0	<5.0
MW-3	24-May-12	**50**	<1.0	3.0	<2.0	0.33	<1.0	<5.0
MW-3	10-Sep-12	**6.2**	<2.0	<2.0	<4.0	0.29	<1.0	<5.0
MW-3	04-Dec-12	<2.0	<2.0	<2.0	<4.0	0.26	<1.0	<5.0
MW-3	26-Mar-13	2.5	<1.0	<1.0	<2.0	0.23	<1.0	<5.0
MW-3	01-Jul-13	<1.0	<1.0	<1.0	<2.0	0.11	<1.0	<5.0
MW-3	25-Sep-13	**30**	<1.0	1.5	3.2	0.23	<1.0	<5.0
MW-3	14-Jan-14	<1.0	<1.0	<1.0	<2.0	0.12	<1.0	<5.0
MW-3	04-Apr-14	<1.0	<1.0	<1.0	<2.0	0.20	<1.0	<5.0
MW-3	26-Sep-14	<1.0	<1.0	<1.0	<2.0	0.095	<1.0	<5.0
MW-3	27-Mar-15	<1.0	<1.0	<1.0	<2.0	0.056	1.1	<5.0
MW-3	15-Sep-15	<1.0	<1.0	<1.0	<1.5	0.130	<1.0	<5.0
MW-3	02-Jun-16	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	26-Jan-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	21-Jun-17	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	14-Aug-17	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-4	05-Mar-09	2.7	1.4	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	06-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	10-Sep-09	**13**	<1.0	<1.0	<2.0	0.051	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -
VOLATILE ORGANICS AND PETROLEUM HYDROCARBONS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-GRO	TPH-DRO	TPH-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	8015B	8015B
New Mexico WQCC		*5*	*1,000*	*700*	*620*	*NE*	*NE*	*NE*
MW-4	15-Jan-10	**8.6**	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	15-Oct-10	**6.3**	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	21-Jan-11	3.6	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	21-Feb-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	24-May-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	04-Apr-14	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	14-Aug-17	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-5	05-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	14-Aug-17	Unable to Sample - Well Obstructed						
MW-6	06-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	07-Aug-17	Plugged and Abandoned						
MW-7	06-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	07-Aug-17	Plugged and Abandoned						
MW-8	06-Mar-09	**160**	170	12	350	2.1	1.5	<5.0
MW-8	07-Aug-17	Plugged and Abandoned						
MW-9	06-Mar-09	**170**	350	49	530	2.5	<1.0	<5.0
MW-9	07-Aug-17	Plugged and Abandoned						
MW-10	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	07-Aug-17	Plugged and Abandoned						
MW-11	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -
VOLATILE ORGANICS AND PETROLEUM HYDROCARBONS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-GRO	TPH-DRO	TPH-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**	**8015B**	**8015B**
New Mexico WQCC		***5***	***1,000***	***700***	***620***	***NE***	***NE***	***NE***
MW-11	07-Aug-17	Plugged and Abandoned						
Downgradient MW-7*	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0

NOTES: NA = Not Analyzed
NE = Not Established
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
MRO = Motor Oil Range Organics
* Monitoring Well from HWY 537 '06-'07 spill

TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - WQCC GROUNDWATER STANDARDS (NMAC 20.6.2.3103)
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Sample Date	Antimony	Arsenic	Copper	Lead	Selenium	Thallium	Uranium	Fluoride	Chloride	Nitrite-N	Nitrate-N	Sulfate	Total Dissolved Solids (TDS)	Aluminum	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Iron	Manganese	Molybdenum	Nickel	Silver	Zinc	Total Mercury	Cyanide	Phenols	pH	Radium 226/228
Analytical Method		200.8/6020							300.0					2540 C	200.7/6010													245.1	4500 CN	SW-846 9067	4500-H+B	903.1 904.0
NM WQCC Standard		0.006	0.01	1.0	0.015	0.05	0.002	0.03	1.6	250	1.0	10.0	600	1,000	5.0	2.0	0.004	0.75	0.005	0.05	0.05	1.0	0.2	1.0	0.2	0.05	10.0	0.002	0.2	0.005	6 to 9	5.0
		(mg/L)																													s.u.	pCi/L
MW-1	26-Mar-19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	**2,300**	NA	NA	NA	NA	NA	NA	NA	NA	0.75	**0.34**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	25-Sep-19	<0.0010	0.0067	0.020	0.0092	0.0014	<0.00050	**0.036**	<0.50	46	<0.50	<0.50	**1,800**	**3,500**	**20 (T)**	0.40	<0.0020	0.082	<0.0020	0.019	0.015	**28 (T)**	**0.68 (T)**	<0.0080	0.027	<0.0050	0.077	<0.00020	<0.00500	**0.028**	7.29	1.056
MW-1	25-Mar-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.73	**0.52**	NA	NA	NA	NA	NA	NA	<0.0025	NA	NA
MW-1	23-Jun-20	NA	NA	NA	NA	NA	NA	0.015	NA	NA	NA	NA	NA	NA	<0.02	NA	NA	NA	NA	NA	NA	0.63	**0.66**	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	29-Sep-21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.42**	NA	NA	NA	NA	NA	NA	<0.005	NA	NA
MW-1	15-Mar-23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.27***	NA	NA	NA	NA	NA	NA	**4.6***	NA	NA
MW-1	21-Jun-23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.26**	NA	NA	NA	NA	NA	NA	**3.1**	NA	NA
MW-1	13-Dec-23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,700**	**3,120**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

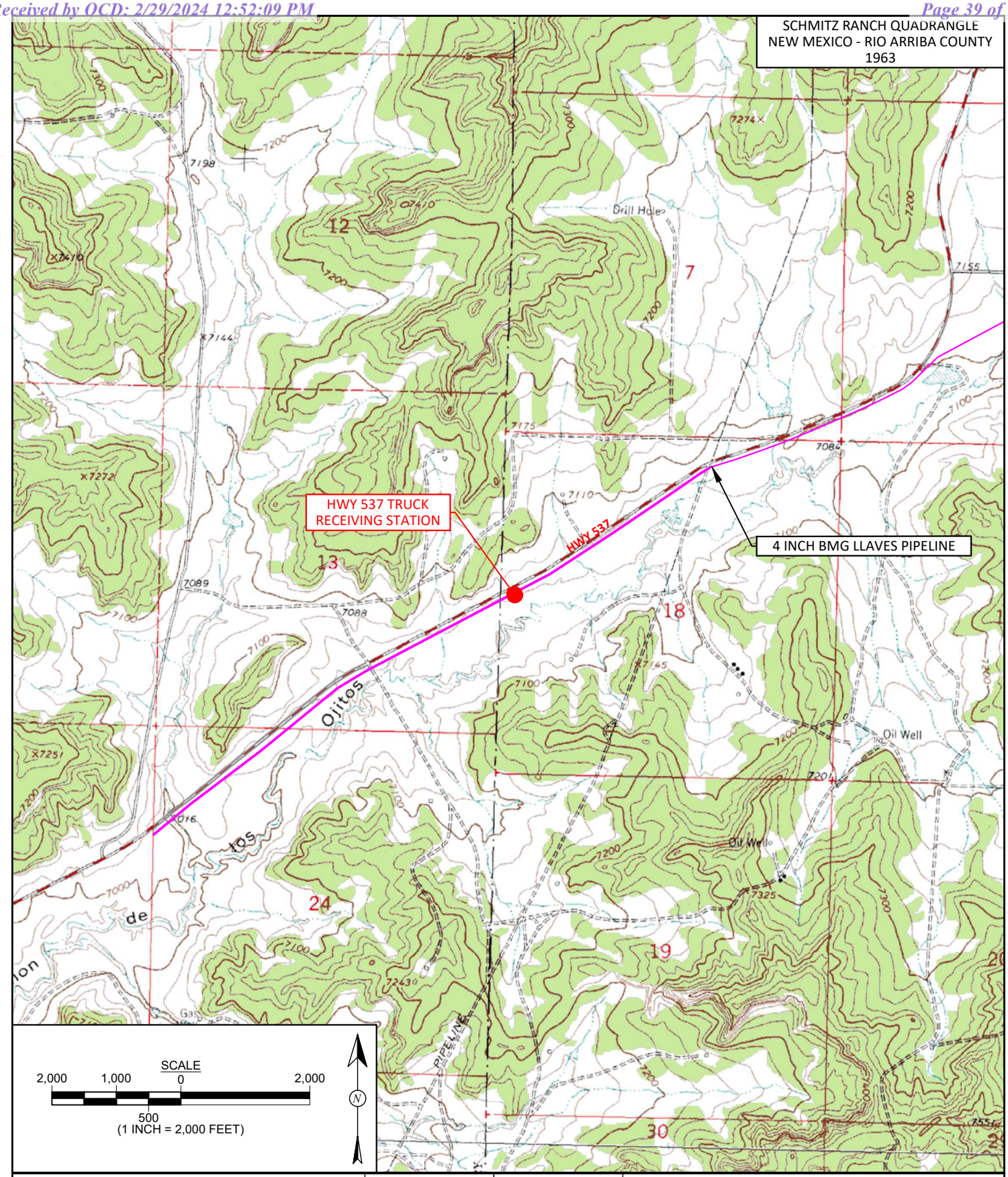
TABLE 3
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - WQCC GROUNDWATER STANDARDS (NMAC 20.6.2.3103)
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Sample Date	Antimony	Arsenic	Copper	Lead	Selenium	Thallium	Uranium	Fluoride	Chloride	Nitrite-N	Nitrate-N	Sulfate	Total Dissolved Solids (TDS)	Aluminum	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Iron	Manganese	Molybdenum	Nickel	Silver	Zinc	Total Mercury	Cyanide	Phenols	pH	Radium 226/228
Analytical Method		200.8/6020							300.0					2540 C	200.7/6010													245.1	4500 CN	SW-846 9067	4500-H+B	903.1 904.0
NM WQCC Standard		0.006	0.01	1.0	0.015	0.05	0.002	0.03	1.6	250	1.0	10.0	600	1,000	5.0	2.0	0.004	0.75	0.005	0.05	0.05	1.0	0.2	1.0	0.2	0.05	10.0	0.002	0.2	0.005	6 to 9	5.0
		(mg/L)																													-	pCi/L
MW-2	25-Mar-20	NA	NA	NA	NA	NA	NA	0.02 (T)	NA	NA	NA	NA	**2,200**	**3,430**	**5.0 (T)**	NA	NA	NA	NA	NA	NA	0.02	0.0044	NA	NA	NA	NA	NA	NA	<0.0025	NA	NA
MW-2	23-Jun-20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	21-Jun-23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.056	NA	NA	NA	NA	NA	NA	<3.0	NA	NA

Notes:
* Collected as part of 2023 sampling
< Analyte not detected above listed method limit
NA Not analyzed
NE Not established
mg/L Milligrams per liter (ppm)
(T) Total (unfiltered) concentration

Contaminants listed above are the dissolved portion of contaminants, unless otherwise specified, in accordance with NMAC 20.6.2.3103.
Bold where results are above WQCC standards.

Figures



DRAWN BY: C. Lameman	**DATE DRAWN:** January 10, 2013
REVISIONS BY: C. Lameman	**DATE REVISED:** January 16, 2024
CHECKED BY: L. Cupps	**DATE CHECKED:** January 16, 2024
APPROVED BY: E. McNally	**DATE APPROVED:** January 16, 2024

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP
BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW ¼ NW ¼ SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39866, W107.19328

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FIGURE 2

AERIAL SITE MAP

BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW¼ NW¼ SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39866, W107.19328

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C. Lameman	January 10, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	January 16, 2024
CHECKED BY:	**DATE CHECKED:**
L. Cupps	January 16, 2024
APPROVED BY:	**DATE APPROVED:**
E. McNally	January 16, 2024

LEGEND

- MONITORING WELL INSTALLED FEBRUARY 2009
- PLUGGED AND ABANDONED WELL (AUGUST 2017)
- SOIL BORING LOCATION (SEPTEMBER 2019)

N

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

STATE HWY. 537
PIPELINE
PROPANE TANK
EXTRACTED GROUNDWATER STORAGE TANK
CATTLE GUARD
PIG RECEIVER
MW-11
FENCE
FORMER 4" DIA. BURIED PIPE
FORMER GATE
FORMER 6" DIA. ABOVE GRADE PIPE
MW-5
FORMER METER SKID/PUMPS
MW-2
FORMER PUMPS
MW-1
FORMER SOIL BERM
LOCATION OF ⅛" CORROSION HOLE, DISCOVERED ON 01/30/09
BORING-1 (B1)
BORING-2 (B2)
MW-4
MW-10
MW-3
FORMER TRUCK LOADING STATION
MW-8
FORMER FENCE
MW-9
MW-7
MW-6
POND
FORMER PIPELINE INLET
FORMER SOIL BERM
FORMER 4" DIA. BURIED PIPE
FORMER GATE

AERIAL SOURCE: © 2023 GOOGLE EARTH PRO, AERIAL DATE: OCTOBER 5, 2016.

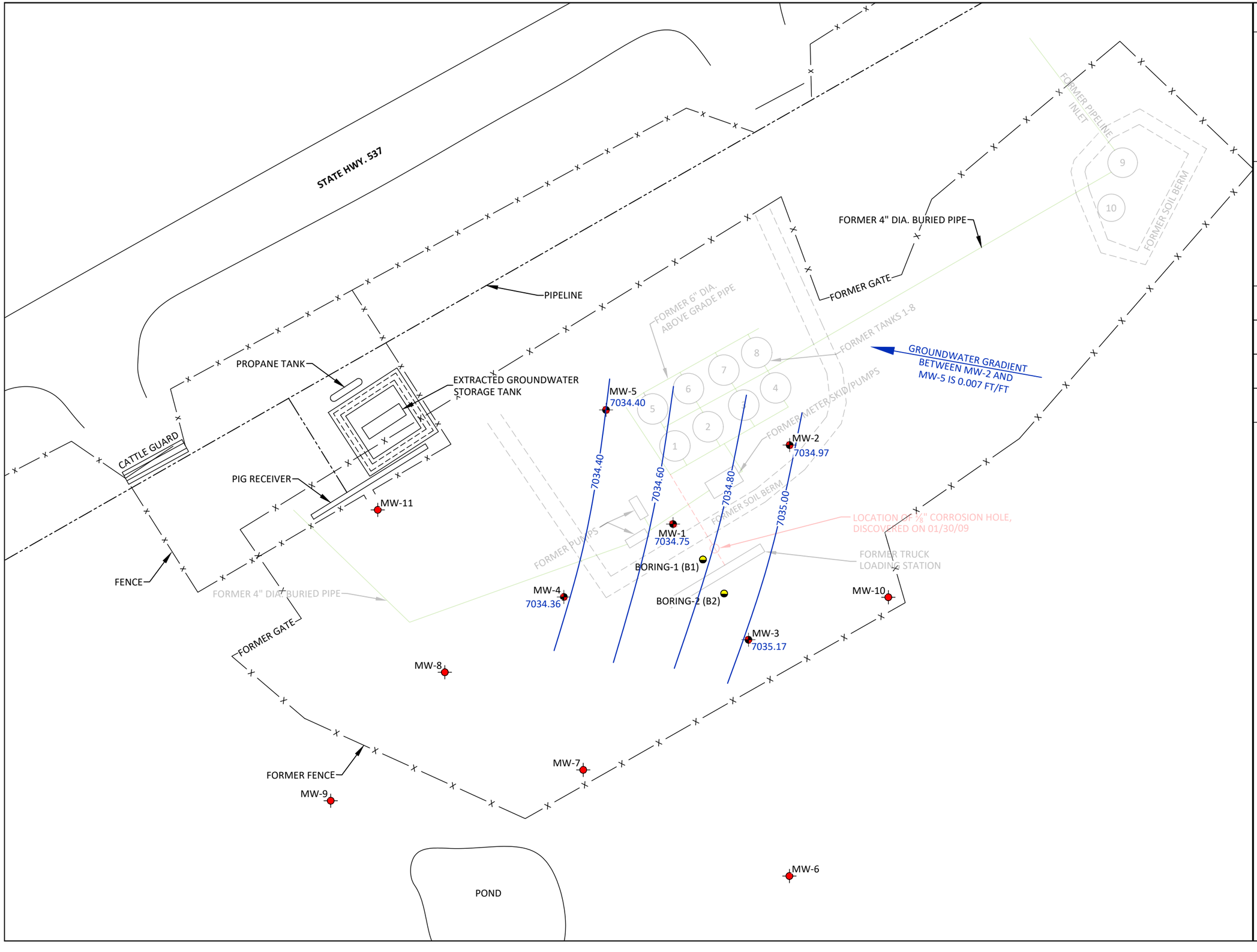

FIGURE 3A

GENERAL SITE MAP AND GROUNDWATER GRADIENT MAP MARCH 2023

BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW¼ NW¼ SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39866, W107.19328

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C. Lameman	January 10, 2013
REVISIONS BY:	**DATE REVISED:**
C. Lameman	January 16, 2024
CHECKED BY:	**DATE CHECKED:**
L. Cupps	January 16, 2024
APPROVED BY:	**DATE APPROVED:**
E. McNally	January 16, 2024

LEGEND

- MONITORING WELL LOCATION (INSTALLED FEBRUARY 2009)
- PLUGGED AND ABANDONED WELL (AUGUST 2017)
- SOIL BORING LOCATION (SEPTEMBER 2019)
- 7034.97 GROUNDWATER ELEVATIONS IN FEET (AMSL)
- −7035.00− GROUNDWATER ELEVATIONS CONTOURS IN FEET (AMSL)
- x FENCE

NOTE: ALL MEASUREMENTS MADE ON MARCH 15, 2023.

N

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

FIGURE 3B

GENERAL SITE MAP AND GROUNDWATER GRADIENT MAP JUNE 2023

BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW¼ NW¼ SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39866, W107.19328

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REVISIONS BY:	**DATE REVISED:**
C. Lameman	January 16, 2024
CHECKED BY:	**DATE CHECKED:**
L. Cupps	January 16, 2024
APPROVED BY:	**DATE APPROVED:**
E. McNally	January 16, 2024

LEGEND

- MONITORING WELL LOCATION (INSTALLED FEBRUARY 2009)
- PLUGGED AND ABANDONED WELL (AUGUST 2017)
- SOIL BORING LOCATION (SEPTEMBER 2019)
- 7034.00 GROUNDWATER ELEVATIONS IN FEET (AMSL)
- -7034.26- GROUNDWATER ELEVATIONS CONTOURS IN FEET (AMSL)
- —— x —— FENCE

NOTE: ALL MEASUREMENTS MADE ON JUNE 21, 2023.

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

FIGURE 3C

GENERAL SITE MAP AND GROUNDWATER GRADIENT MAP SEPTEMBER 2023

BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW¼ NW¼ SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39866, W107.19328

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C. Lameman	January 16, 2024
CHECKED BY:	**DATE CHECKED:**
L. Cupps	January 16, 2024
APPROVED BY:	**DATE APPROVED:**
E. McNally	January 16, 2024

LEGEND

- MONITORING WELL LOCATION (INSTALLED FEBRUARY 2009)
- PLUGGED AND ABANDONED WELL (AUGUST 2017)
- SOIL BORING LOCATION (SEPTEMBER 2019)
- 7033.09 GROUNDWATER ELEVATIONS IN FEET (AMSL)
- -7033.00- GROUNDWATER ELEVATIONS CONTOURS IN FEET (AMSL)
- FENCE

NOTE: ALL MEASUREMENTS MADE ON SEPTEMBER 13, 2023.

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)

FIGURE 3D

GENERAL SITE MAP AND GROUNDWATER GRADIENT MAP DECEMBER 2023

BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW¼ NW¼ SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39866, W107.19328

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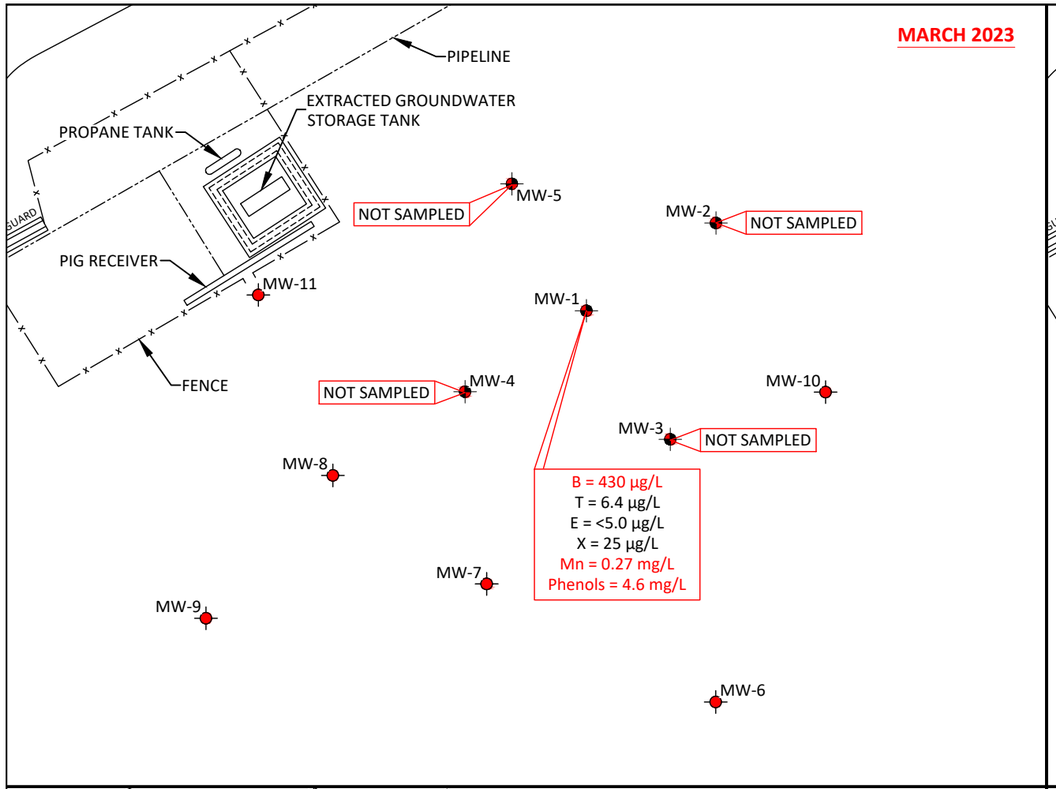
C. Lameman	January 16, 2024
CHECKED BY:	**DATE CHECKED:**
L. Cupps	January 16, 2024
APPROVED BY:	**DATE APPROVED:**
E. McNally	January 16, 2024

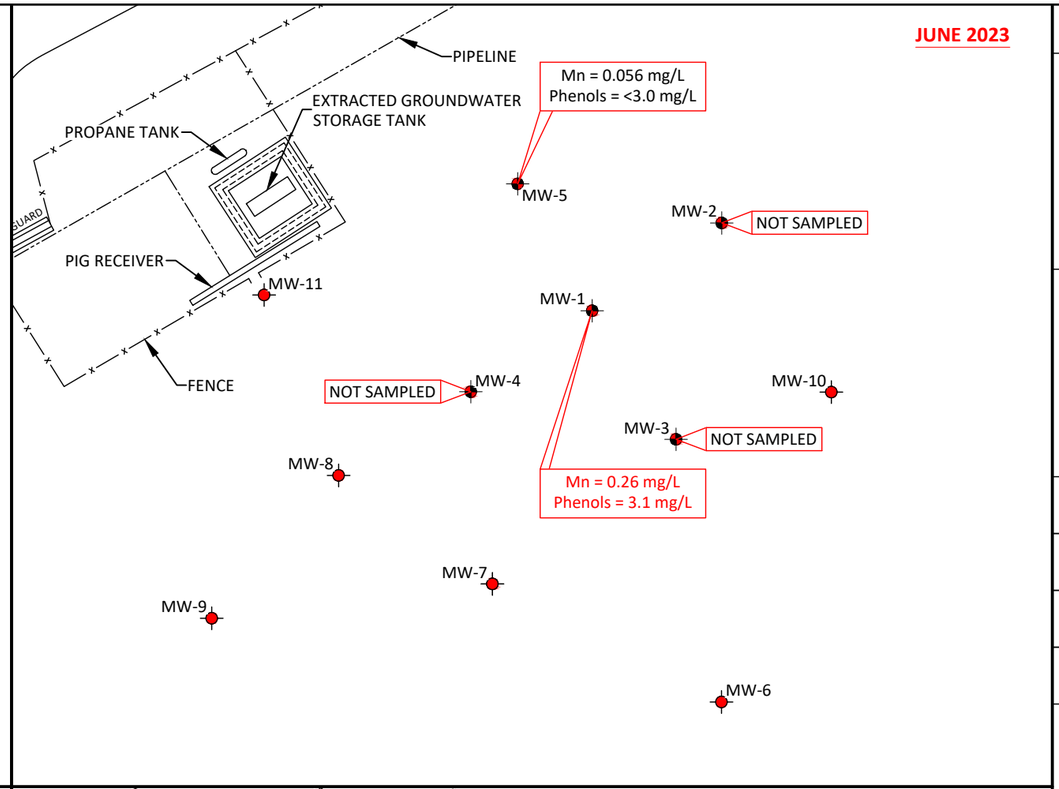
LEGEND

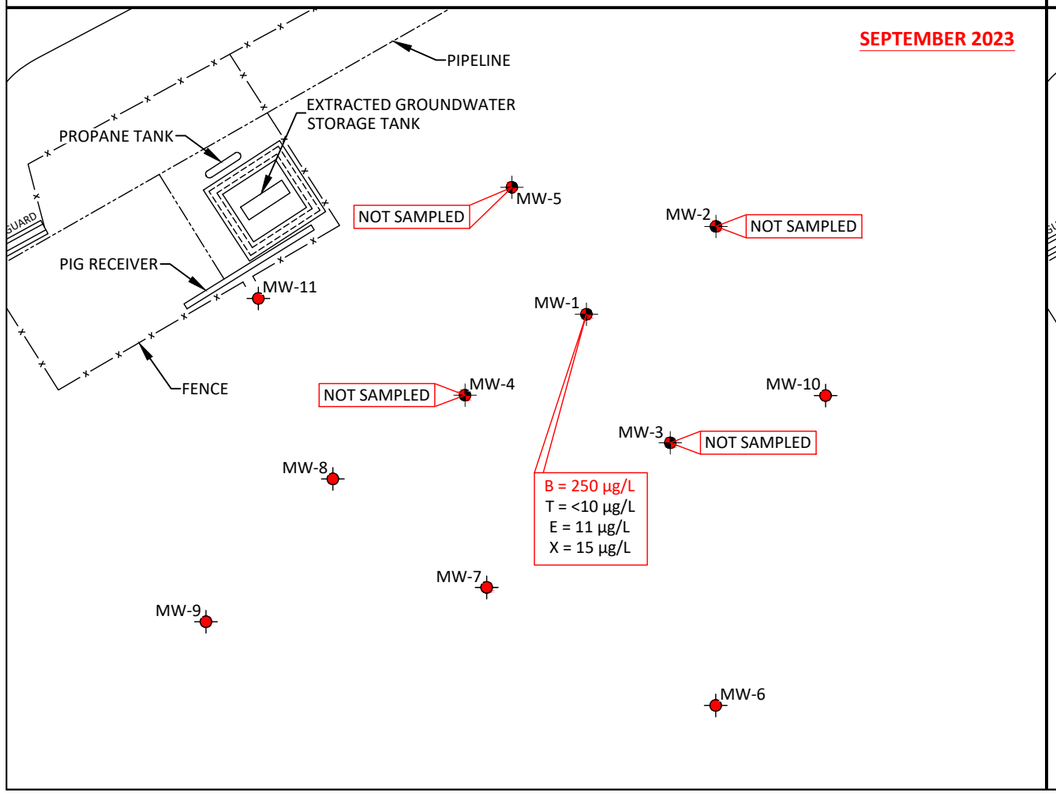
- MONITORING WELL LOCATION (INSTALLED FEBRUARY 2009)
- PLUGGED AND ABANDONED WELL (AUGUST 2017)
- SOIL BORING LOCATION (SEPTEMBER 2019)
- 7033.33 GROUNDWATER ELEVATIONS IN FEET (AMSL)
- –7032.25– GROUNDWATER ELEVATIONS CONTOURS IN FEET (AMSL)
- —x— FENCE

NOTE: ALL MEASUREMENTS MADE ON DECEMBER 13, 2023.

SCALE
40 20 0 40
10
(1 INCH = 40 FEET)







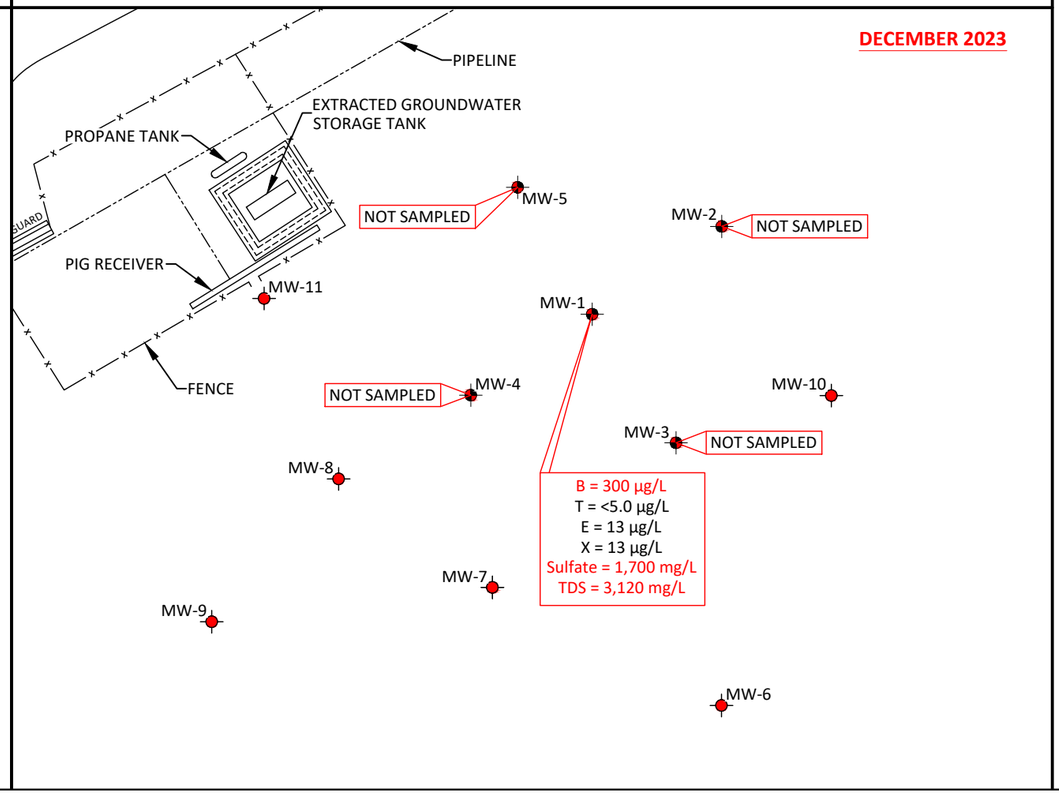


FIGURE 4

2023 GROUNDWATER CONTAMINANT CONCENTRATIONS MAP

BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW¼ NW¼ SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.39866, W107.19328

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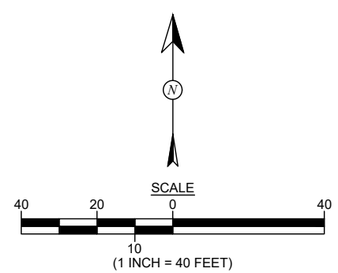
REVISIONS BY:	**DATE REVISED:**
C. Lameman	January 16, 2024
CHECKED BY:	**DATE CHECKED:**
L. Cupps	January 16, 2024
APPROVED BY:	**DATE APPROVED:**
E. McNally	January 16, 2024

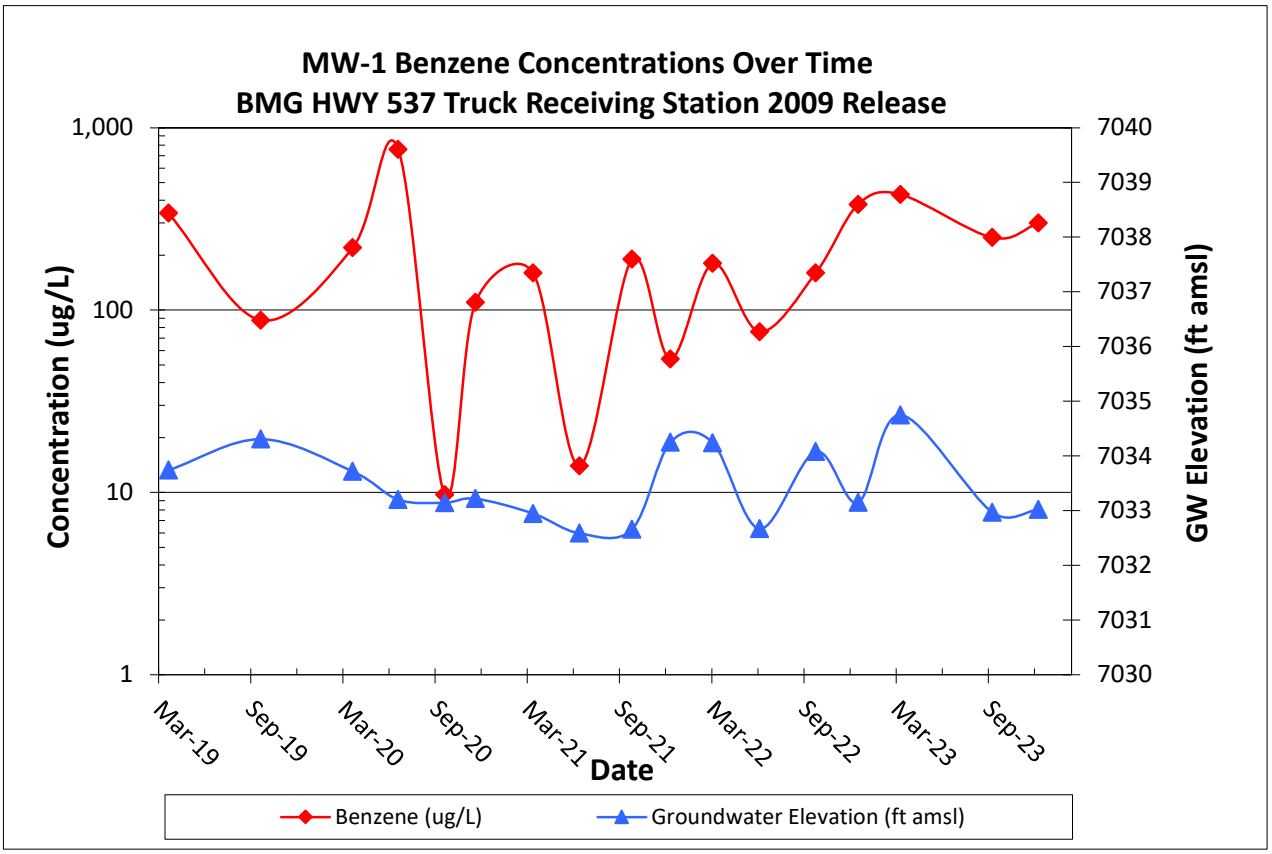
LEGEND

⊕	MONITORING WELL LOCATION (INSTALLED FEBRUARY 2009)
⊕	PLUGGED AND ABANDONED WELL (AUGUST 2017)
x	FENCE
B	BENZENE
T	TOLUENE
E	ETHYL-BENZENE
X	XYLENES
Mn	MANGANESE
TDS	TDS
NA	NOT ANALYZED
µg/L	MICROGRAMS PER LITER (ppb)
mg/L	MILLIGRAMS PER LITER (ppm)
<	BELOW DETECTION LIMIT

NOTE: ALL SAMPLES COLLECTED ON MARCH 15, JUNE 21, SEPTEMBER 13, AND DECEMBER 13, 2023. ANALYZED PER EPA METHOD 8260B, 6010, SW-846 9067, 300.0 AND 2540 C.



Graphs


MW-1 Benzene Concentrations Over Time
BMG HWY 537 Truck Receiving Station 2009 Release
Concentration (ug/L)
1,000
100
10
1
GW Elevation (ft amsl)
7040
7039
7038
7037
7036
7035
7034
7033
7032
7031
7030
Mar-19
Sep-19
Mar-20
Sep-20
Mar-21
Sep-21
Mar-22
Sep-22
Mar-23
Sep-23
Date
Benzene (ug/L)
Groundwater Elevation (ft amsl)

Appendix

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
Site: BMG
Location: Hwy 537 2009 Release
Tech: JO

Project No.:
Date: 03-15-23
Time: 11:50
Form: 1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	12:17		29.91		2" Well - TDB ≈ 39.41
MW-2	12:12	—	29.68	—	2" Well - TDB ≈ 44.0
MW-3	12:09	—	28.84	—	2" Well - TDB ≈ 44.0
MW-4	12:03	—	29.36	—	2" Well - TDB ≈ 43.0
MW-5	12:00	—	30.39	—	2" Well - TDB ≈ 44.0

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: BMG
Location: 2009 Release
Project: Groundwater Monitoring and Sampling
Sampling Technician: JO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 29.91 Time: 12:17 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 29.91 Time: 12:18 (taken prior to purging well)
Final D.T.W. (ft): 29.99 Time: 12:36 (taken after sample collection)
If NAPL Present: D.T.P.: Sheen D.T.W.: Sheen Thickness: 2.01 Time: 12:17

Project No.:
Date: 03-15-23
Arrival Time: 11:50
Air Temp: 48° cloudy
T.O.C. Elev. (ft):
Total Well Depth (ft): 39.41

Water Quality Parameters - Recorded During Well Purging

YSI # 2 Calibrated by: JO

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
12:19	NO WATER QUALITY READING DUE TO SHEEN						
12:42						Samples Collected	

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

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 - 4.6 gallons
Absorbent sock replaced with new sock - 12:44

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
Site: BMG
Location: Hwy 537 2009 Release
Tech: JD

Project No.:
Date: 6-21-23
Time: 12:29
Form: 1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	13:43	30.71	30.72	.01	2" Well Gray w/HC odor
MW-2	14:31		30.39		2" Well
MW-3	14:33		29.96		2" Well
MW-4	14:35		30.18		2" Well
MW-5	12:39	—	30.91	—	2" Well Clear - No odor 12:39

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: 2009 Release
Project: Groundwater Monitoring and Sampling
Sampling Technician: JD
Purge / No Purge: Purge
Well Diameter (in): 2

Project No.:
Date: 6-21-23
Arrival Time: 13:40
Air Temp: 91° Sunny - Windy
T.O.C. Elev. (ft): 7064.66
Total Well Depth (ft): 39.41

Initial D.T.W. (ft): 30.72 Time: 13:43 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 30.72 Time: 13:44 *(taken prior to purging well)*
Final D.T.W. (ft): 30.76 Time: 14:12 *(taken after sample collection)*
If NAPL Present: D.T.P.: 30.71 D.T.W.: 30.72 Thickness: 7.01 Time: 13:43

Water Quality Parameters - Recorded During Well Purging

YSI # 2

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
13:45						Sheen	
14:02						Samples Collected	

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

USEPA Method 8021 for BTEX and 8015 for TPH (GRO/DRO/MRO) -
(5 - HgCl2 40 mL VOAs and 1 - 125 mL Amber glass non-preserve)

Disposal of Purged Water: Onsite storage Tanks
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 4.23 gallons
* Sock replaced with metal screen cage

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: BMG - 2089
Location: HWY 537
Project: Groundwater Monitoring and Sampling
Sampling Technician: SO
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 30.91 Time: 12:39 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 30.91 Time: 12:40 (taken prior to purging well)
Final D.T.W. (ft): 33.52 Time: 13:24 (taken after sample collection)
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.:
Date: 6-21-23
Arrival Time: 12:29
Air Temp: 98° Sunny - Windy
T.O.C. Elev. (ft):
Total Well Depth (ft): 44.01

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
12:50	14.5	4564	3.9	7.3	56.8	.25	Clear No odor
12:53	13.5	4385	1.8	7.2	69.1	1 gallon	Brown Turbid No odor
12:56	13.4	4387	2.4	7.2	73.5	2 gallons	S.A.A.
12:59	13.3	4404	2.5	7.2	75.9	3 gallons	Dark Brown Turbid No odor
13:13	13.3	4417	2.6	7.2	77.0	4 gallons	S.A.A.
13:16	13.4	4394	2.3	7.2	63.9	5 gallons	S.A.A.
13:19	13.4	4411	3.9	7.2	22.8	6 gallons	Dark Brown Turbid No odor
13:21						Samples Collected	

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

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 = 6.3 gallons ≈ 6.0

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
Site: BMG
Location: Hwy 537 2009 Release
Tech:

Project No.:
Date:
Time:
Form: 1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	12:49	Sheen	31.69		2" Well *
MW-2	12:41		31.56		2" Well *
MW-3	11:50		30.48		2" Well *
MW-4	12:30		31.91		2" Well *
MW-5	12:39		31.01		2" Well *

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

* Values are approximate due to interface probe not working well

GROUNDWATER SAMPLE COLLECTION FORM

Monitor Well No: MW-1

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

Site: BMG
Location: Hwy 537 2009 Release
Project: Groundwater Monitoring and Sampling
Sampling Technician: JD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 31.69 * **Time:** 12:49 *(taken at initial gauging of all we*
Confirm D.T.W. (ft): 31.69 **Time:** 12:49 *(taken prior to purging well)*
Final D.T.W. (ft): 31.48 **Time:** 13:22 *(taken after sample collection)*
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.:
Date: 9-13-23
Arrival Time: 11:00
Air Temp: 65° Cloudy
T.O.C. Elev. (ft):
Total Well Depth (ft):

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/C
12:52						Sheen	
13:18				—		Samples Collected	—

Analytical Parameters (include analysis method and number and type of sample containe

*Approximate

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

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
Site: BMG
Location: Hwy 537 2009 Release
Tech: JO

Project No.:
Date: 12-13-23
Time: 12:15
Form: 1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-1	13:24		31.64		2" Well
MW-2	13:18		31.32		2" Well
MW-3	13:15		30.89		2" Well
MW-4	13:13		30.04		2" Well
MW-5	13:22		31.78		2" Well Sock Replaced

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: 3MG 2009
Location: Hwy 537, Lindrith NM
Project: Groundwater Monitoring and Sampling
Sampling Technician: JD
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): 31.64 Time: 13:24 (taken at initial gauging of all wells)
Confirm D.T.W. (ft): 31.64 Time: 13:25 (taken prior to purging well)
Final D.T.W. (ft): 31.69 Time: 13:48 (taken after sample collection)
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.:
Date: 12-13-23
Arrival Time: 12:32
Air Temp: 43° Windy
T.O.C. Elev. (ft):
Total Well Depth (ft): 39.45

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
13:25	No Water Quality Readings Due to - Sheen -						Grayish HC odor -
13:49					—	Samples Collected -	

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

Disposal of Purged Water: 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:

Calculated Purge - 3.8 gallons

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 03, 2023

Angela Ledgerwood

Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: BMG Hwy 537 2009 Release OrderNo.: 2303A32

Dear Angela Ledgerwood:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/21/2023 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 **2303A32**
Date Reported: **4/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 3/17/2023 3:49:00 PM
Lab ID: 2303A32-001 **Matrix:** AQUEOUS **Received Date:** 3/21/2023 6:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
TOTAL PHENOLICS BY SW-846 9067						Analyst: **JPM**	
Phenolics	4.6	3.0		µg/L	1	3/31/2023 1:58:00 PM	74052

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303A32**

03-Apr-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **MB-74052**	SampType: **MBLK**	TestCode: **Total Phenolics by SW-846 9067**
Client ID: **PBW**	Batch ID: **74052**	RunNo: **95712**
Prep Date: **3/31/2023**	Analysis Date: **3/31/2023**	SeqNo: **3464011** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	ND	3.0								

Sample ID: **LCS-74052**	SampType: **LCS**	TestCode: **Total Phenolics by SW-846 9067**
Client ID: **LCSW**	Batch ID: **74052**	RunNo: **95712**
Prep Date: **3/31/2023**	Analysis Date: **3/31/2023**	SeqNo: **3464012** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	16	3.0	20.00	0	79.6	38.6	115			

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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Services | Work Order Number: 2303A32 | RcptNo: 1

Received By: Tracy Casarrubias 3/21/2023 6:20:00 AM

Completed By: Tracy Casarrubias 3/21/2023 6:58:07 AM

Reviewed By: JN 3/21/23

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: 1
(<2 or >12 unless noted)
Adjusted? NO
Checked by: MH 3-21-23

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	2.1	Good	Yes	Yogi		

Chain-of-Custody Record

Client: **Animas Environmental Services**	Turn-Around Time: X Standard ☐ Rush
	Project Name: **BMG Hwy 537 2009 Release**
Mailing Address: **PO Box 8**	
Farmington, NM 87499-0008	Project #:
Phone #: 720-537-6650	
Email or Fax#: aledgerwood@animasenvironmental.com	Project Manager: **Angela Ledgerwood** **Elizabeth McNally**
QA/QC Package: X Standard ☐ Level 4 (Full Validation)	
Accreditation: ☐ NELAP ☐ Other	Sampler: J. Oyebi
☐ EDD (Type)	On Ice: ☑ Yes ☐ No
	Sample Temperature: 2.0+0.1 = 2.1

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2303AB32	Analysis Request: Phenols per SW846 9067
3-17-23	15:49	H_2O	MW-1	1L - Amber Glass	H_2SO_4, cool	001	X

Date: 3/20/23	Time: 1542	Relinquished by:	Received by:	Date: 3/20/23	Time: 1542
Date: 3/20/23	Time: 1816	Relinquished by:	Received by:	Date: 3/21/23	Time: 6:20

Remarks: Please bill direct to Benson-Montin-Greer bmg@bmgdrilling.com. Call with any questions.
Phenol/9067: 1x1-L amber glass bottle, H_2SO_4

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 repo

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 23, 2023

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

RE: BMG Hwy 537 2009 Release OrderNo.: 2303953

Dear Angela Ledgerwood:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/17/2023 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 **2303953**
Date Reported: **3/23/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 3/15/2023 12:42:00 PM
Lab ID: 2303953-001 **Matrix:** AQUEOUS **Received Date:** 3/17/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **JRR**	
Manganese	0.27	0.0020	*	mg/L	1	3/21/2023 2:45:49 PM	A95439

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303953**

23-Mar-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **MB-A**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A95439**	RunNo: **95439**
Prep Date:	Analysis Date: **3/21/2023**	SeqNo: **3452355** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	ND	0.0020								

Sample ID: **LCSLL-A**	SampType: **LCSLL**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **A95439**	RunNo: **95439**
Prep Date:	Analysis Date: **3/21/2023**	SeqNo: **3452356** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.0022	0.0020	0.002000	0	108	50	150			

Sample ID: **LCS-A**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A95439**	RunNo: **95439**
Prep Date:	Analysis Date: **3/21/2023**	SeqNo: **3452357** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.52	0.0020	0.5000	0	105	85	115			

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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Services | Work Order Number: 2303953 | RcptNo: 1

Received By: Juan Rojas 3/17/2023 7:35:00 AM

Completed By: Sean Livingston 3/17/2023 11:02:04 AM

Reviewed By: DAD 3/17/23

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: 0 (<2 or >12 unless noted)

Adjusted? NO

Checked by: JM 3/17/23

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	0.6	Good	Not Present	Morty		

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: **Animas Environmental Services**

Mailing Address: **PO Box 8**

Farmington, NM 87499-0008

Phone #: 720-537-6650

Email or Fax#: aledgerwood@animasenvironmental.com

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other________

☐ EDD (Type) ________

Turn-Around Time:

X Standard ☐ Rush________

Project Name: **BMG Hwy 537 2009 Release**

Project #:

Project Manager: **Angela Ledgerwood**, **Elizabeth McNally**

Sampler: J. Oyebi

On Ice: ☑ Yes ☐ No (Mor, Ty)

Sample Temperature: 0.4+0.2=0.6

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2303953	Dissolved Mn (200.7/6010)	~~Phenols per SW846 9067~~								Air Bubbles (Y or N)
3/15/23	12:42	H_2O	MW-1	~~250mL Amber~~ 1x125-mL HDPE	~~Cool~~ HNO_3, cool	001	X	~~X~~								

Date	Time	Relinquished by	Received by	Date	Time
3/16/23	1544	[signature]	[signature]	3/16/23	1544
3/16/23	1752	[signature]	[signature] courier	3/17/23	7:35

Remarks: Please bill direct to Benson-Montin-Greer bmg@bmgdrilling.com. Call with any questions. Diss. Mn/200.7|6010: 1x125-mL HDPE bottle, HNO_3 - must be field-filtered prior to preservation

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: www.hallenvironmental.com

March 27, 2023

Elizabeth McNally

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

RE: BMG Hwy 537 2009 Release OrderNo.: 2303950

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/17/2023 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 **2303950**
Date Reported: **3/27/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 3/15/2023 12:42:00 PM
Lab ID: 2303950-001 **Matrix:** AQUEOUS **Received Date:** 3/17/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	430	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Toluene	6.4	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Ethylbenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2,4-Trimethylbenzene	12	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,3,5-Trimethylbenzene	8.3	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Naphthalene	ND	10		µg/L	5	3/24/2023 4:26:47 AM	B95531
1-Methylnaphthalene	ND	20		µg/L	5	3/24/2023 4:26:47 AM	B95531
2-Methylnaphthalene	ND	20		µg/L	5	3/24/2023 4:26:47 AM	B95531
Acetone	ND	50		µg/L	5	3/24/2023 4:26:47 AM	B95531
Bromobenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Bromodichloromethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Bromoform	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Bromomethane	ND	15		µg/L	5	3/24/2023 4:26:47 AM	B95531
2-Butanone	ND	50		µg/L	5	3/24/2023 4:26:47 AM	B95531
Carbon disulfide	ND	50		µg/L	5	3/24/2023 4:26:47 AM	B95531
Carbon Tetrachloride	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Chlorobenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Chloroethane	ND	10		µg/L	5	3/24/2023 4:26:47 AM	B95531
Chloroform	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Chloromethane	ND	15		µg/L	5	3/24/2023 4:26:47 AM	B95531
2-Chlorotoluene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
4-Chlorotoluene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
cis-1,2-DCE	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	3/24/2023 4:26:47 AM	B95531
Dibromochloromethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Dibromomethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,3-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,4-Dichlorobenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Dichlorodifluoromethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,1-Dichloroethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,1-Dichloroethene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2-Dichloropropane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,3-Dichloropropane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
2,2-Dichloropropane	ND	10		µg/L	5	3/24/2023 4:26:47 AM	B95531

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303950**
Date Reported: **3/27/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 3/15/2023 12:42:00 PM
Lab ID: 2303950-001 **Matrix:** AQUEOUS **Received Date:** 3/17/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Hexachlorobutadiene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
2-Hexanone	ND	50		µg/L	5	3/24/2023 4:26:47 AM	B95531
Isopropylbenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
4-Isopropyltoluene	6.5	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
4-Methyl-2-pentanone	ND	50		µg/L	5	3/24/2023 4:26:47 AM	B95531
Methylene Chloride	ND	15		µg/L	5	3/24/2023 4:26:47 AM	B95531
n-Butylbenzene	ND	15		µg/L	5	3/24/2023 4:26:47 AM	B95531
n-Propylbenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
sec-Butylbenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Styrene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
tert-Butylbenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	3/24/2023 4:26:47 AM	B95531
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
trans-1,2-DCE	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,1,1-Trichloroethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,1,2-Trichloroethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Trichloroethene (TCE)	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Trichlorofluoromethane	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
1,2,3-Trichloropropane	ND	10		µg/L	5	3/24/2023 4:26:47 AM	B95531
Vinyl chloride	ND	5.0		µg/L	5	3/24/2023 4:26:47 AM	B95531
Xylenes, Total	25	7.5		µg/L	5	3/24/2023 4:26:47 AM	B95531
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	5	3/24/2023 4:26:47 AM	B95531
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	5	3/24/2023 4:26:47 AM	B95531
Surr: Dibromofluoromethane	99.7	70-130		%Rec	5	3/24/2023 4:26:47 AM	B95531
Surr: Toluene-d8	103	70-130		%Rec	5	3/24/2023 4:26:47 AM	B95531

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303950**
Date Reported: **3/27/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2009 Release **Collection Date:**
Lab ID: 2303950-002 **Matrix:** TRIP BLANK **Received Date:** 3/17/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Toluene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Ethylbenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Naphthalene	ND	2.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1-Methylnaphthalene	ND	4.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
2-Methylnaphthalene	ND	4.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Acetone	ND	10		µg/L	1	3/24/2023 4:56:33 AM	B95531
Bromobenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Bromodichloromethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Bromoform	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Bromomethane	ND	3.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
2-Butanone	ND	10		µg/L	1	3/24/2023 4:56:33 AM	B95531
Carbon disulfide	ND	10		µg/L	1	3/24/2023 4:56:33 AM	B95531
Carbon Tetrachloride	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Chlorobenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Chloroethane	ND	2.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Chloroform	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Chloromethane	ND	3.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
2-Chlorotoluene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
4-Chlorotoluene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
cis-1,2-DCE	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Dibromochloromethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Dibromomethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,1-Dichloroethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,1-Dichloroethene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2-Dichloropropane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,3-Dichloropropane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
2,2-Dichloropropane	ND	2.0		µg/L	1	3/24/2023 4:56:33 AM	B95531

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2303950**
Date Reported: **3/27/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2009 Release **Collection Date:**
Lab ID: 2303950-002 **Matrix:** TRIP BLANK **Received Date:** 3/17/2023 7:35:00 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	3/24/2023 4:56:33 AM	B95531
Hexachlorobutadiene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
2-Hexanone	ND	10		µg/L	1	3/24/2023 4:56:33 AM	B95531
Isopropylbenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
4-Isopropyltoluene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
4-Methyl-2-pentanone	ND	10		µg/L	1	3/24/2023 4:56:33 AM	B95531
Methylene Chloride	ND	3.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
n-Butylbenzene	ND	3.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
n-Propylbenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
sec-Butylbenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Styrene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
tert-Butylbenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
trans-1,2-DCE	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Trichlorofluoromethane	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Vinyl chloride	ND	1.0		µg/L	1	3/24/2023 4:56:33 AM	B95531
Xylenes, Total	ND	1.5		µg/L	1	3/24/2023 4:56:33 AM	B95531
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%Rec	1	3/24/2023 4:56:33 AM	B95531
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	3/24/2023 4:56:33 AM	B95531
Surr: Dibromofluoromethane	103	70-130		%Rec	1	3/24/2023 4:56:33 AM	B95531
Surr: Toluene-d8	96.5	70-130		%Rec	1	3/24/2023 4:56:33 AM	B95531

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303950**

27-Mar-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **LCSW** Batch ID: **B95531** RunNo: **95531**

Prep Date: Analysis Date: **3/23/2023** SeqNo: **3455282** 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	106	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	108	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	9.6		10.00		96.0	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**

Client ID: **PBW** Batch ID: **B95531** RunNo: **95531**

Prep Date: Analysis Date: **3/23/2023** SeqNo: **3455318** 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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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#: **2303950**

27-Mar-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **mb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **B95531**	RunNo: **95531**
Prep Date:	Analysis Date: **3/23/2023**	SeqNo: **3455318** 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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2303950**

27-Mar-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **mb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **B95531**	RunNo: **95531**
Prep Date:	Analysis Date: **3/23/2023**	SeqNo: **3455318** 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		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.8		10.00		98.4	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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Services | Work Order Number: 2303950 | RcptNo: 1

Received By: Juan Rojas 3/17/2023 7:35:00 AM

Completed By: Sean Livingston 3/17/2023 10:33:02 AM

Reviewed By: 3/17/23

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: _____

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	0.6	Good	Not Present	Morty		

Chain-of-Custody Record

Client: Animas Environmental Services	Turn-Around Time: X Standard ☐ Rush
Mailing Address: PO Box 8 Farmington, NM 87499-0008	Project Name: BMG Hwy 537 2009 Release
Phone #: 720-537-6650	Project #:
Email or Fax#: aledgerwood@animasenvironmental.com	Project Manager: Angela Ledgerwood Elizabeth McNally
QA/QC Package: X Standard ☐ Level 4 (Full Validation)	Sampler: J. Oyebi
Accreditation: ☐ NELAP ☐ Other	On Ice: ~~☐ Yes~~ ☐ No Not Y
☐ EDD (Type)	Sample Temperature: 0.4+0.2=0.6

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. 2303950	Full List VOCs 8260								Air Bubbles (Y or N)
3/15/23	12:42	H_2O	MW-1	3 x 40-mL VOA	HgCl2, cool	001	x								
			Trip Blanks	2 x 40mL VOA	$HgCl_2$, cool	002	x								

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/16/23	1544			3/16/23	1544
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/16/23	1752		courier	3/17/23	7:15

Remarks: Please bill direct to Benson-Montin-Greer bmg@bmgdrilling.com. 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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 07, 2023

Angela Ledgerwood
Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX:

RE: BMG Hwy 537 2009 Release OrderNo.: 2306C91

Dear Angela Ledgerwood:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/24/2023 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2306C91**
Date Reported: **7/7/2023**

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 6/21/2023 2:02:00 PM
Lab ID: 2306C91-001 **Matrix:** AQUEOUS **Received Date:** 6/24/2023 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **VP**	
Manganese	0.26	0.0020	*	mg/L	1	6/27/2023 8:33:07 AM	A97726
TOTAL PHENOLICS BY SW-846 9067						Analyst: **JPM**	
Phenolics	3.1	3.0		µg/L	1	6/29/2023 3:20:00 PM	75921

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

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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2306C91**
Date Reported: **7/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-5
Project: BMG Hwy 537 2009 Release
Collection Date: 6/21/2023 1:21:00 PM
Lab ID: 2306C91-002 **Matrix:** AQUEOUS **Received Date:** 6/24/2023 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst: **VP**	
Manganese	0.056	0.0020	*	mg/L	1	6/27/2023 8:37:34 AM	A97726
TOTAL PHENOLICS BY SW-846 9067						Analyst: **JPM**	
Phenolics	ND	3.0		µg/L	1	6/29/2023 3:20:00 PM	75921

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

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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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#: **2306C91**

07-Jul-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **MB-A**	SampType: **MBLK**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A97726**	RunNo: **97726**
Prep Date:	Analysis Date: **6/27/2023**	SeqNo: **3554152** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	ND	0.0020								

Sample ID: **LCSLL-A**	SampType: **LCSLL**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC**	Batch ID: **A97726**	RunNo: **97726**
Prep Date:	Analysis Date: **6/27/2023**	SeqNo: **3554153** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.0021	0.0020	0.002000	0	103	50	150			

Sample ID: **LCS-A**	SampType: **LCS**	TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A97726**	RunNo: **97726**
Prep Date:	Analysis Date: **6/27/2023**	SeqNo: **3554154** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Manganese	0.49	0.0020	0.5000	0	97.5	85	115			

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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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#: **2306C91**

07-Jul-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **MB-75921**	SampType: **MBLK**	TestCode: **Total Phenolics by SW-846 9067**
Client ID: **PBW**	Batch ID: **75921**	RunNo: **97842**
Prep Date: **6/29/2023**	Analysis Date: **6/29/2023**	SeqNo: **3558725** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	ND	3.0								

Sample ID: **LCS-75921**	SampType: **LCS**	TestCode: **Total Phenolics by SW-846 9067**
Client ID: **LCSW**	Batch ID: **75921**	RunNo: **97842**
Prep Date: **6/29/2023**	Analysis Date: **6/29/2023**	SeqNo: **3558726** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	15	3.0	20.00	0	75.7	38.6	115			

Sample ID: **LCSD-75921**	SampType: **LCSD**	TestCode: **Total Phenolics by SW-846 9067**
Client ID: **LCSS02**	Batch ID: **75921**	RunNo: **97842**
Prep Date: **6/29/2023**	Analysis Date: **6/29/2023**	SeqNo: **3558727** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Phenolics	14	3.0	20.00	0	67.8	38.6	115	11.0	20	

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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Services | Work Order Number: 2306C91 | RcptNo: 1

Received By: Tracy Casarrubias 6/24/2023 7:45:00 AM

Completed By: Tracy Casarrubias 6/25/2023 8:03:32 AM

Reviewed By: DAD 6/26/23

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: 4
(<2 or >12 unless noted)
Adjusted? NO
Checked by: SCM 06/26/23

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	5.3	Good	Yes	Yogi		

Chain-of-Custody Record

Client: **Animas Environmental Services**

Mailing Address: **PO Box 8**

Farmington, NM 87499-0008

Phone #: 720-537-6650

Email or Fax#: aledgerwood@animasenvironmental.com

QA/QC Package:

X Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other_____

☐ EDD (Type) _____

Turn-Around Time:

X Standard ☐ Rush_____

Project Name:

BMG Hwy 537 2009 Release

Project #:

Project Manager:

Angela Ledgerwood

Elizabeth McNally

Sampler: J. Oyebi

On Ice: ☒ Yes ☐ No (yg)

Sample Temperature: 0.2+0.1=5.3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2306091	Analysis Request: Dissolved Mn (200.7/6010)	Phenols per SW846 9067							Air Bubbles (Y or N)
6-21-23	14:02	H_2O	MW-1	1x1-L amber glass 1x125-mL HDPE	H_2SO_4, cool HNO_3, cool	001	X	X							
6-21-23	13:21	H_2O	MW-5	1x1-L amber glass 1x125-mL HDPE	H_2SO_4, cool HNO_3, cool	002	X	X							
		~~H_2O~~	~~Trip Blank~~	~~2-40mL Vial~~	~~HCl, cool~~	003	~~X~~	~~X~~							

Date: 6-23-23 Time: 18:35 Relinquished by: [signature]

Received by: [signature] Date: 6/24/23 Time: 7:45

Date: Time: Relinquished by:

Received by: Date: Time:

Remarks: Please bill direct to Benson-Montin-Greer bmg@bmgdrilling.com. Call with any questions.
Phenol/9067: 1x1-L amber glass bottle, H_2SO_4 pH<2
Diss. Mn/200.7|6010: 1x125-mL HDPE bottle, HNO_3 - must be field-filtered prior to preservation

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: www.hallenvironmental.com

September 21, 2023

Angela Todd

Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX:

RE: BMG Hwy 537 2009 Release OrderNo.: 2309856

Dear Angela Todd:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/15/2023 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

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2309856**
Date Reported: **9/21/2023**

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 9/13/2023 1:18:00 PM
Lab ID: 2309856-001 **Matrix:** AQUEOUS **Received Date:** 9/15/2023 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	250	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Toluene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Ethylbenzene	11	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2,4-Trimethylbenzene	14	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,3,5-Trimethylbenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Naphthalene	ND	20		µg/L	10	9/18/2023 3:55:00 PM	R99760
1-Methylnaphthalene	ND	40		µg/L	10	9/18/2023 3:55:00 PM	R99760
2-Methylnaphthalene	ND	40		µg/L	10	9/18/2023 3:55:00 PM	R99760
Acetone	ND	100		µg/L	10	9/18/2023 3:55:00 PM	R99760
Bromobenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Bromodichloromethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Bromoform	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Bromomethane	ND	30		µg/L	10	9/18/2023 3:55:00 PM	R99760
2-Butanone	ND	100		µg/L	10	9/18/2023 3:55:00 PM	R99760
Carbon disulfide	ND	100		µg/L	10	9/18/2023 3:55:00 PM	R99760
Carbon Tetrachloride	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Chlorobenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Chloroethane	ND	20		µg/L	10	9/18/2023 3:55:00 PM	R99760
Chloroform	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Chloromethane	ND	30		µg/L	10	9/18/2023 3:55:00 PM	R99760
2-Chlorotoluene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
4-Chlorotoluene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
cis-1,2-DCE	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
cis-1,3-Dichloropropene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	9/18/2023 3:55:00 PM	R99760
Dibromochloromethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Dibromomethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2-Dichlorobenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,3-Dichlorobenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,4-Dichlorobenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Dichlorodifluoromethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,1-Dichloroethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,1-Dichloroethene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2-Dichloropropane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,3-Dichloropropane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
2,2-Dichloropropane	ND	20		µg/L	10	9/18/2023 3:55:00 PM	R99760

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2309856**
Date Reported: **9/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 9/13/2023 1:18:00 PM
Lab ID: 2309856-001 **Matrix:** AQUEOUS **Received Date:** 9/15/2023 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Hexachlorobutadiene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
2-Hexanone	ND	100		µg/L	10	9/18/2023 3:55:00 PM	R99760
Isopropylbenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
4-Isopropyltoluene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
4-Methyl-2-pentanone	ND	100		µg/L	10	9/18/2023 3:55:00 PM	R99760
Methylene Chloride	ND	30		µg/L	10	9/18/2023 3:55:00 PM	R99760
n-Butylbenzene	ND	30		µg/L	10	9/18/2023 3:55:00 PM	R99760
n-Propylbenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
sec-Butylbenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Styrene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
tert-Butylbenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	9/18/2023 3:55:00 PM	R99760
Tetrachloroethene (PCE)	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
trans-1,2-DCE	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
trans-1,3-Dichloropropene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2,3-Trichlorobenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2,4-Trichlorobenzene	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,1,1-Trichloroethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,1,2-Trichloroethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Trichloroethene (TCE)	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Trichlorofluoromethane	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
1,2,3-Trichloropropane	ND	20		µg/L	10	9/18/2023 3:55:00 PM	R99760
Vinyl chloride	ND	10		µg/L	10	9/18/2023 3:55:00 PM	R99760
Xylenes, Total	15	15		µg/L	10	9/18/2023 3:55:00 PM	R99760
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%Rec	10	9/18/2023 3:55:00 PM	R99760
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	10	9/18/2023 3:55:00 PM	R99760
Surr: Dibromofluoromethane	95.7	70-130		%Rec	10	9/18/2023 3:55:00 PM	R99760
Surr: Toluene-d8	101	70-130		%Rec	10	9/18/2023 3:55:00 PM	R99760

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2309856**
Date Reported: **9/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2009 Release **Collection Date:**
Lab ID: 2309856-002 **Matrix:** TRIP BLANK **Received Date:** 9/15/2023 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Toluene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Ethylbenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Naphthalene	ND	2.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1-Methylnaphthalene	ND	4.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
2-Methylnaphthalene	ND	4.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Acetone	ND	10		µg/L	1	9/18/2023 3:30:00 PM	R99760
Bromobenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Bromodichloromethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Bromoform	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Bromomethane	ND	3.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
2-Butanone	ND	10		µg/L	1	9/18/2023 3:30:00 PM	R99760
Carbon disulfide	ND	10		µg/L	1	9/18/2023 3:30:00 PM	R99760
Carbon Tetrachloride	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Chlorobenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Chloroethane	ND	2.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Chloroform	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Chloromethane	ND	3.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
2-Chlorotoluene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
4-Chlorotoluene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
cis-1,2-DCE	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Dibromochloromethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Dibromomethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,1-Dichloroethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,1-Dichloroethene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2-Dichloropropane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,3-Dichloropropane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
2,2-Dichloropropane	ND	2.0		µg/L	1	9/18/2023 3:30:00 PM	R99760

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2309856**
Date Reported: **9/21/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2009 Release **Collection Date:**
Lab ID: 2309856-002 **Matrix:** TRIP BLANK **Received Date:** 9/15/2023 7:00:00 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	9/18/2023 3:30:00 PM	R99760
Hexachlorobutadiene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
2-Hexanone	ND	10		µg/L	1	9/18/2023 3:30:00 PM	R99760
Isopropylbenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
4-Isopropyltoluene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
4-Methyl-2-pentanone	ND	10		µg/L	1	9/18/2023 3:30:00 PM	R99760
Methylene Chloride	ND	3.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
n-Butylbenzene	ND	3.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
n-Propylbenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
sec-Butylbenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Styrene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
tert-Butylbenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
trans-1,2-DCE	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Trichlorofluoromethane	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Vinyl chloride	ND	1.0		µg/L	1	9/18/2023 3:30:00 PM	R99760
Xylenes, Total	ND	1.5		µg/L	1	9/18/2023 3:30:00 PM	R99760
Surr: 1,2-Dichloroethane-d4	98.4	70-130		%Rec	1	9/18/2023 3:30:00 PM	R99760
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	9/18/2023 3:30:00 PM	R99760
Surr: Dibromofluoromethane	101	70-130		%Rec	1	9/18/2023 3:30:00 PM	R99760
Surr: Toluene-d8	94.6	70-130		%Rec	1	9/18/2023 3:30:00 PM	R99760

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2309856**

21-Sep-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R99760**	RunNo: **99760**
Prep Date:	Analysis Date: **9/18/2023**	SeqNo: **3646201** 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	21	1.0	20.00	0	104	70	130			
Chlorobenzene	21	1.0	20.00	0	106	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	95.8	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.0	70	130			
Surr: Toluene-d8	9.4		10.00		94.1	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R99760**	RunNo: **99760**
Prep Date:	Analysis Date: **9/18/2023**	SeqNo: **3647392** 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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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#: **2309856**

21-Sep-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R99760**	RunNo: **99760**
Prep Date:	Analysis Date: **9/18/2023**	SeqNo: **3647392** 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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2309856**

21-Sep-23

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R99760**	RunNo: **99760**
Prep Date:	Analysis Date: **9/18/2023**	SeqNo: **3647392** 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	9.3		10.00		93.0	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.7	70	130			
Surr: Toluene-d8	9.1		10.00		91.3	70	130			

Sample ID: **2309856-001ams**	SampType: **MS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-1**	Batch ID: **R99760**	RunNo: **99760**
Prep Date:	Analysis Date: **9/18/2023**	SeqNo: **3647395** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	470	10	200.0	246.3	109	70	130			
Toluene	210	10	200.0	0	103	70	130			
Chlorobenzene	210	10	200.0	0	103	70	130			
1,1-Dichloroethene	200	10	200.0	0	99.3	70	130			
Trichloroethene (TCE)	200	10	200.0	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	91		100.0		90.7	70	130			
Surr: 4-Bromofluorobenzene	100		100.0		101	70	130			
Surr: Dibromofluoromethane	97		100.0		96.7	70	130			
Surr: Toluene-d8	100		100.0		100	70	130			

Sample ID: **2309856-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-1**	Batch ID: **R99760**	RunNo: **99760**
Prep Date:	Analysis Date: **9/18/2023**	SeqNo: **3647396** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	440	10	200.0	246.3	98.1	70	130	4.97	20	
Toluene	200	10	200.0	0	101	70	130	1.59	20	
Chlorobenzene	210	10	200.0	0	103	70	130	0.650	20	
1,1-Dichloroethene	180	10	200.0	0	91.9	70	130	7.75	20	
Trichloroethene (TCE)	190	10	200.0	0	94.8	70	130	5.63	20	
Surr: 1,2-Dichloroethane-d4	91		100.0		91.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	100		100.0		102	70	130	0	0	
Surr: Dibromofluoromethane	93		100.0		93.1	70	130	0	0	
Surr: Toluene-d8	100		100.0		102	70	130	0	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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Services | Work Order Number: 2309856 | RcptNo: 1

Received By: Tracy Casarrubias 9/15/2023 7:00:00 AM

Completed By: Tracy Casarrubias 9/15/2023 10:51:36 AM

Reviewed By: JM 9/18/23

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 ☑ SCM 9/18/23	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 ☐	# of preserved bottles checked for pH: / (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
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 ☐	Checked by: SCM 9/18/23

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: SAMPLE CO2A RECEIVED WITH AIR BUBBLES. SCM 9/18/23

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good	Yes	Morty		

Chain-of-Custody Record

Client: **Animas Environmental Services**

Mailing Address: **PO Box 8**
Farmington, NM 87499-0008

Phone #: **720-537-6650**

Email or Fax#: **atodd@animasenvironmental.com**

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

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

Turn-Around Time:
X Standard ☐ Rush_____

Project Name:
BMG Hwy 537 2009 Release

Project #:

Project Manager: **Angela Todd**
Elizabeth McNally

Sampler: **Jason Oyebi**
On Ice: ☒ Yes ☐ No monty
Sample Temperature: 2.8 - 0.1 = 2.7°C

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2309856	Analysis Request: VOCs per USEPA 8260	Air Bubbles (Y or N)
9/13/23	1318	H_2O	MW-1	3x40-mL VOA	HCl, cool	001	X	
			TRIP BLANKS	2 VOA				
			SCM 9/18/23					
			Trip Blank	2 x 40 mL VOA	HCl, Cool		X	

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/14/23	1457			9/14/23	1457
9/14/23	1754		Received by:	9/15/23	7:00

Remarks: Please bill direct to Benson-Montin-Greer bmg@bmgdrilling.com. 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.

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 09, 2024

Angela Todd
Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX:

RE: BMG Hwy 537 2009 Release OrderNo.: 2312921

Dear Angela Todd:

Eurofins Environment Testing South Central, LLC received 2 sample(s) on 12/15/2023 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 do not hesitate to contact Eurofins Albuquerque 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 **2312921**
Date Reported: **1/9/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** MW-1
Project: BMG Hwy 537 2009 Release **Collection Date:** 12/13/2023 1:49:00 PM
Lab ID: 2312921-001 **Matrix:** AQUEOUS **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **RBC**	
Sulfate	1700	25	*	mg/L	50	1/8/2024 8:33:20 PM	R102312
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**	
Total Dissolved Solids	3120	100	*D	mg/L	1	12/22/2023 11:46:00 AM	79519
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	300	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Toluene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Ethylbenzene	13	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2,4-Trimethylbenzene	16	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,3,5-Trimethylbenzene	13	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Naphthalene	ND	10		µg/L	5	12/24/2023 9:09:00 PM	R102066
1-Methylnaphthalene	ND	20		µg/L	5	12/24/2023 9:09:00 PM	R102066
2-Methylnaphthalene	ND	20		µg/L	5	12/24/2023 9:09:00 PM	R102066
Acetone	ND	50		µg/L	5	12/24/2023 9:09:00 PM	R102066
Bromobenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Bromodichloromethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Bromoform	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Bromomethane	ND	15		µg/L	5	12/24/2023 9:09:00 PM	R102066
2-Butanone	ND	50		µg/L	5	12/24/2023 9:09:00 PM	R102066
Carbon disulfide	ND	50		µg/L	5	12/24/2023 9:09:00 PM	R102066
Carbon Tetrachloride	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Chlorobenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Chloroethane	ND	10		µg/L	5	12/24/2023 9:09:00 PM	R102066
Chloroform	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Chloromethane	ND	15		µg/L	5	12/24/2023 9:09:00 PM	R102066
2-Chlorotoluene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
4-Chlorotoluene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
cis-1,2-DCE	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	12/24/2023 9:09:00 PM	R102066
Dibromochloromethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Dibromomethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2-Dichlorobenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,3-Dichlorobenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,4-Dichlorobenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Dichlorodifluoromethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2312921**
Date Reported: **1/9/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-1
Project: BMG Hwy 537 2009 Release
Collection Date: 12/13/2023 1:49:00 PM
Lab ID: 2312921-001 **Matrix:** AQUEOUS **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloroethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,1-Dichloroethene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2-Dichloropropane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,3-Dichloropropane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
2,2-Dichloropropane	ND	10		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,1-Dichloropropene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Hexachlorobutadiene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
2-Hexanone	ND	50		µg/L	5	12/24/2023 9:09:00 PM	R102066
Isopropylbenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
4-Isopropyltoluene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
4-Methyl-2-pentanone	ND	50		µg/L	5	12/24/2023 9:09:00 PM	R102066
Methylene Chloride	ND	15		µg/L	5	12/24/2023 9:09:00 PM	R102066
n-Butylbenzene	ND	15		µg/L	5	12/24/2023 9:09:00 PM	R102066
n-Propylbenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
sec-Butylbenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Styrene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
tert-Butylbenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	12/24/2023 9:09:00 PM	R102066
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
trans-1,2-DCE	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,1,1-Trichloroethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,1,2-Trichloroethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Trichloroethene (TCE)	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Trichlorofluoromethane	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
1,2,3-Trichloropropane	ND	10		µg/L	5	12/24/2023 9:09:00 PM	R102066
Vinyl chloride	ND	5.0		µg/L	5	12/24/2023 9:09:00 PM	R102066
Xylenes, Total	13	7.5		µg/L	5	12/24/2023 9:09:00 PM	R102066
Surr: 1,2-Dichloroethane-d4	87.3	70-130		%Rec	5	12/24/2023 9:09:00 PM	R102066
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	5	12/24/2023 9:09:00 PM	R102066
Surr: Dibromofluoromethane	98.8	70-130		%Rec	5	12/24/2023 9:09:00 PM	R102066
Surr: Toluene-d8	103	70-130		%Rec	5	12/24/2023 9:09:00 PM	R102066

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2312921**
Date Reported: **1/9/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2009 Release **Collection Date:**
Lab ID: 2312921-002 **Matrix:** TRIP BLANK **Received Date:** 12/15/2023 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Toluene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Ethylbenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Naphthalene	ND	2.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1-Methylnaphthalene	ND	4.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
2-Methylnaphthalene	ND	4.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Acetone	ND	10		µg/L	1	12/24/2023 9:33:00 PM	R102066
Bromobenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Bromodichloromethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Bromoform	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Bromomethane	ND	3.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
2-Butanone	ND	10		µg/L	1	12/24/2023 9:33:00 PM	R102066
Carbon disulfide	ND	10		µg/L	1	12/24/2023 9:33:00 PM	R102066
Carbon Tetrachloride	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Chlorobenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Chloroethane	ND	2.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Chloroform	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Chloromethane	ND	3.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
2-Chlorotoluene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
4-Chlorotoluene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
cis-1,2-DCE	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Dibromochloromethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Dibromomethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,1-Dichloroethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,1-Dichloroethene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2-Dichloropropane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,3-Dichloropropane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
2,2-Dichloropropane	ND	2.0		µg/L	1	12/24/2023 9:33:00 PM	R102066

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2312921**
Date Reported: **1/9/2024**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2009 Release **Collection Date:**
Lab ID: 2312921-002 **Matrix:** TRIP BLANK **Received Date:** 12/15/2023 6:50:00 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	12/24/2023 9:33:00 PM	R102066
Hexachlorobutadiene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
2-Hexanone	ND	10		µg/L	1	12/24/2023 9:33:00 PM	R102066
Isopropylbenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
4-Isopropyltoluene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
4-Methyl-2-pentanone	ND	10		µg/L	1	12/24/2023 9:33:00 PM	R102066
Methylene Chloride	ND	3.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
n-Butylbenzene	ND	3.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
n-Propylbenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
sec-Butylbenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Styrene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
tert-Butylbenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
trans-1,2-DCE	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Trichlorofluoromethane	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Vinyl chloride	ND	1.0		µg/L	1	12/24/2023 9:33:00 PM	R102066
Xylenes, Total	ND	1.5		µg/L	1	12/24/2023 9:33:00 PM	R102066
Surr: 1,2-Dichloroethane-d4	88.5	70-130		%Rec	1	12/24/2023 9:33:00 PM	R102066
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/24/2023 9:33:00 PM	R102066
Surr: Dibromofluoromethane	99.6	70-130		%Rec	1	12/24/2023 9:33:00 PM	R102066
Surr: Toluene-d8	93.5	70-130		%Rec	1	12/24/2023 9:33:00 PM	R102066

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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312921**

09-Jan-24

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R102312**	RunNo: **102312**
Prep Date:	Analysis Date: **1/8/2024**	SeqNo: **3778112** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R102312**	RunNo: **102312**
Prep Date:	Analysis Date: **1/8/2024**	SeqNo: **3778113** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.4	0.50	10.00	0	94.3	90	110			

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R102312**	RunNo: **102312**
Prep Date:	Analysis Date: **1/8/2024**	SeqNo: **3778166** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R102312**	RunNo: **102312**
Prep Date:	Analysis Date: **1/8/2024**	SeqNo: **3778167** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.4	0.50	10.00	0	94.2	90	110			

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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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#: **2312921**

09-Jan-24

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW**	Batch ID: **R102066**	RunNo: **102066**
Prep Date:	Analysis Date: **12/24/2023**	SeqNo: **3767183** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.8	70	130			
Toluene	19	1.0	20.00	0	93.8	70	130			
Chlorobenzene	19	1.0	20.00	0	94.9	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	89.8	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	88.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.9	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: **R102066**	RunNo: **102066**
Prep Date:	Analysis Date: **12/24/2023**	SeqNo: **3767184** 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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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#: **2312921**

09-Jan-24

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R102066**	RunNo: **102066**
Prep Date:	Analysis Date: **12/24/2023**	SeqNo: **3767184** 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	Above Quantitation Range/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 standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2312921**

09-Jan-24

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW**	Batch ID: **R102066**	RunNo: **102066**
Prep Date:	Analysis Date: **12/24/2023**	SeqNo: **3767184** 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	9.1		10.00		91.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/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#: **2312921**

09-Jan-24

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID: **MB-79519**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **79519**	RunNo: **102043**
Prep Date: **12/20/2023**	Analysis Date: **12/22/2023**	SeqNo: **3765883** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50.0								

Sample ID: **LCS-79519**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **79519**	RunNo: **102043**
Prep Date: **12/20/2023**	Analysis Date: **12/22/2023**	SeqNo: **3765884** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	50.0	1000	0	102	80	120			

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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

eurofins | Environment Testing

Eurofins Environment Testing South Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 2312921 RcptNo: 1

Received By: Tracy Casarrubias 12/15/2023 6:50:00 AM

Completed By: Tracy Casarrubias 12/15/2023 10:23:18 AM

Reviewed By: SCM 12/15/23

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: JM 12/15/23

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	1.8	Good	Yes	Morty		

Chain-of-Custody Record

Client: **Animas Environmental Services**

Mailing Address: **PO Box 8**
Farmington, NM 87499-0008

Phone #: **720-537-6650**

Email or Fax#: **atodd@animasenvironmental.com**

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

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

Turn-Around Time:
X Standard ☐ Rush_____

Project Name:
BMG Hwy 537 2009 Release

Project #:

Project Manager: **Angela Todd**
Elizabeth McNally

Sampler: **Jason Oyebi**
On Ice: ☒ Yes ☐ No marty
Sample Temperature: 1.8 + 0 = 1.8°c

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

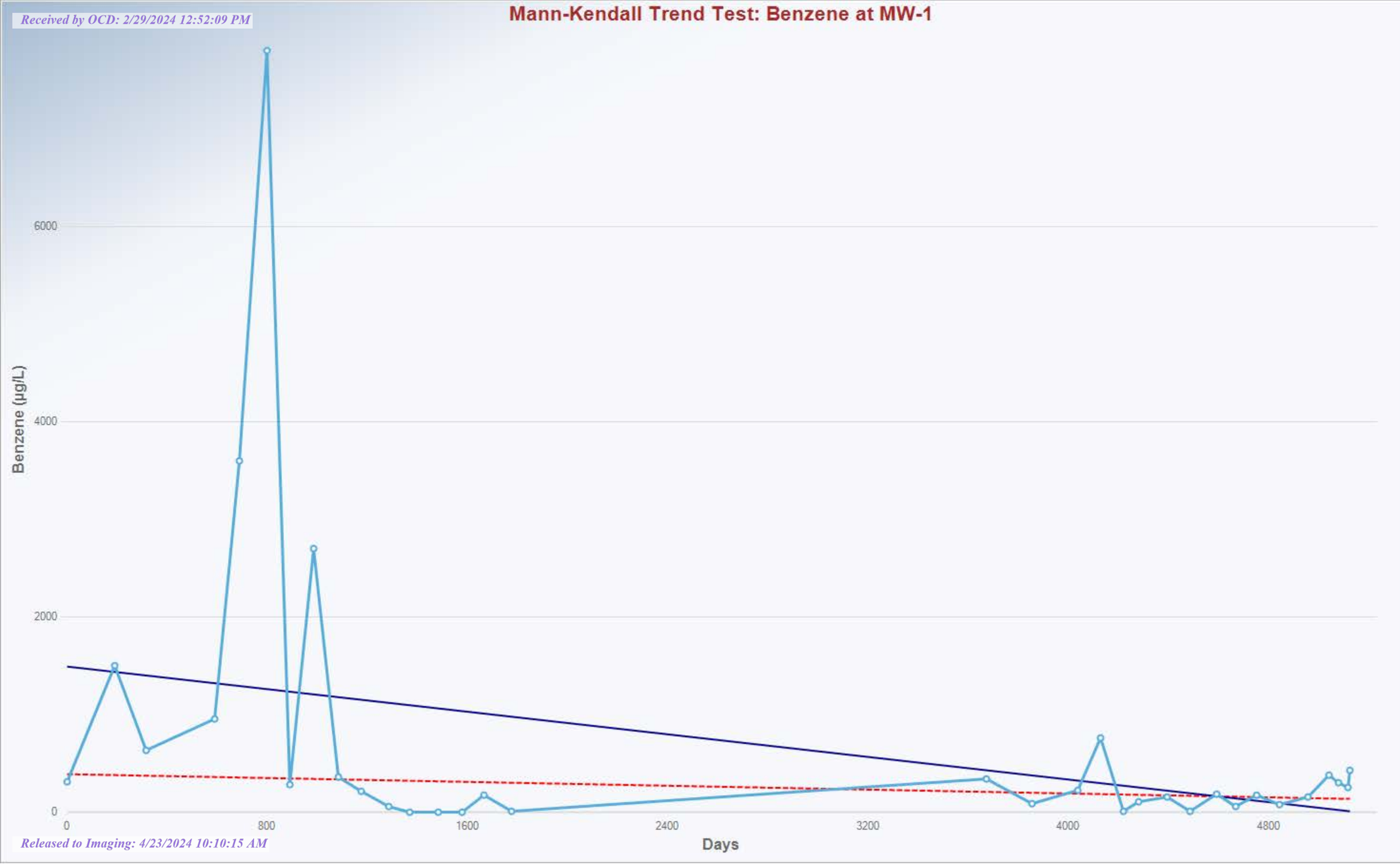
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2312971	Analysis Request: VOCs via Method 8260B	Total dissolved solids via Method 2540C	Sulfate per Method 300.0						Air Bubbles (Y or N)
12-13-23	13:49	H_2O	MW-1	5x40-mL VOA 1x500-mL poly	5-HCl or HgCl2 1-no pres	001	X	X	X						
		H_2O	Trip Blank	2x40-mL VOA	HCl, cool	002	X								

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/14/23	1332			12/14/23	1332
Date:	Time:	Relinquished by:	Received by: courier	Date	Time
12/14/23	1750			12/15/23	6:50

Remarks: Please bill direct to Benson-Montin-Greer bmg@bmgdrilling.com. 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.

Mann-Kendall Trend Test: Benzene at MW-1



Mann-Kendall Trend Analysis

n	33
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	64.5084
Standardized Value of S	-1.3797
M-K Test Value (S)	-90
Appx. Critical Value (0.05)	-1.6449
Approximate p-value	0.0838

OLS Regression Line (Blue)

OLS Regression Slope	-0.2897
OLS Regression Intercept	1,493.8284

Theil-Sen Trend Line (Red)

Theil-Sen Slope	-0.0484
Theil-Sen Intercept	387.7141

Insufficient statistical evidence of a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis	
User Selected Options		
Date/Time of Computation	ProUCL 5.2 1/25/2024 4:04:46 PM	
From File	MW-1 BTEX 2009 to 2023.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

Benzene (µg/L)

General Statistics

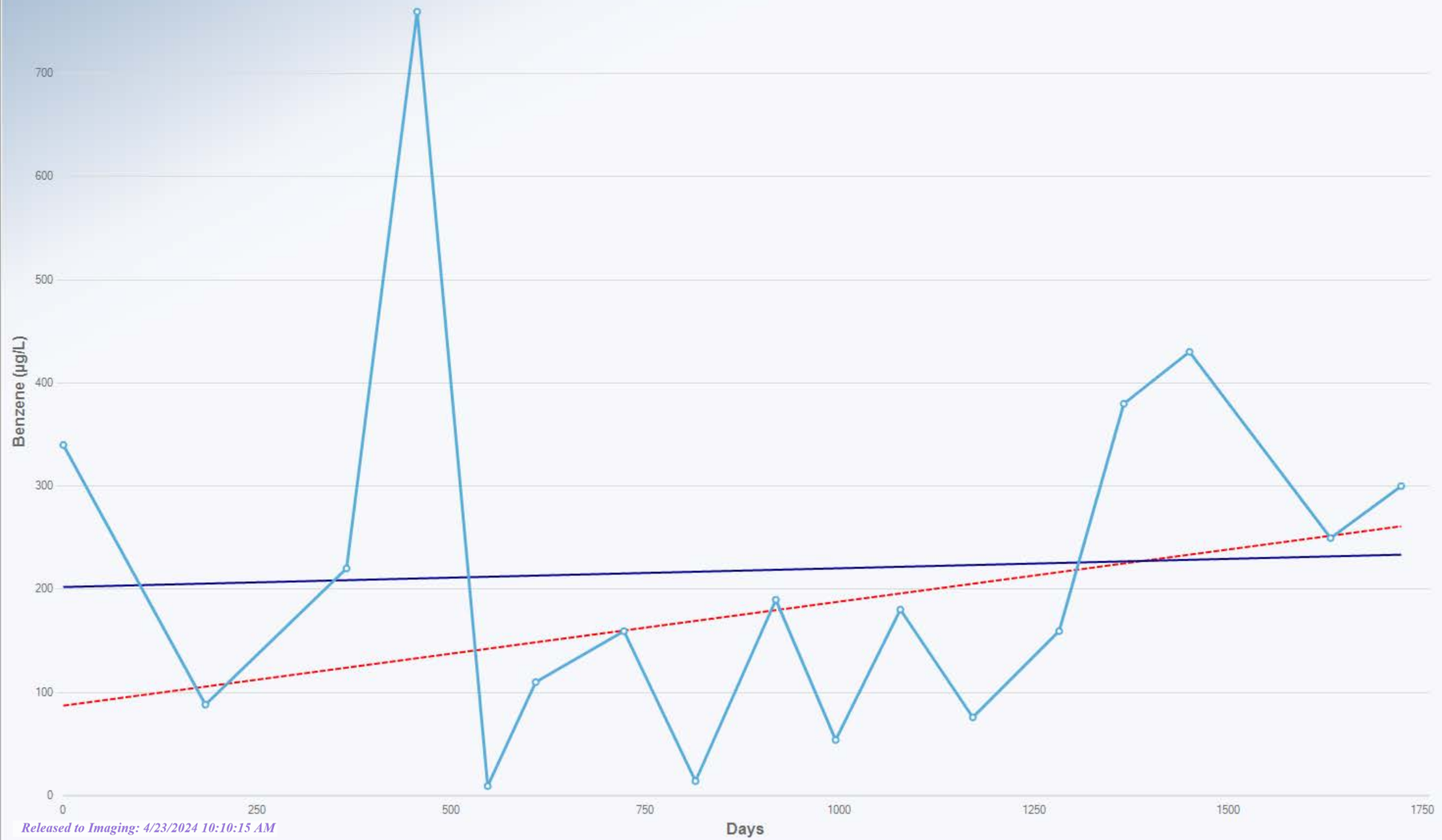
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1.2
Maximum	7800
Mean	676.5
Geometric Mean	150.8
Median	210
Standard Deviation	1493
Coefficient of Variation	2.207

Mann-Kendall Test

M-K Test Value (S)	-90
Critical Value (0.05)	-1.645
Standard Deviation of S	64.51
Standardized Value of S	-1.38
Approximate p-value	0.0838

Insufficient evidence to identify a significant trend at the specified level of significance.

Mann-Kendall Trend Test: Benzene at MW-1



Mann-Kendall Trend Analysis

n	17
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	24.2556
Standardized Value of S	0.9895
M-K Test Value (S)	25
Tabulated p-value	0.1740
Approximate p-value	0.1612

OLS Regression Line (Blue)

OLS Regression Slope	0.0182
OLS Regression Intercept	202.5259

Theil-Sen Trend Line (Red)

Theil-Sen Slope	0.1009
Theil-Sen Intercept	87.3286

Insufficient statistical evidence of a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis	
User Selected Options		
Date/Time of Computation	ProUCL 5.2 1/25/2024 4:14:06 PM	
From File	MW-1 BTEX 2019 to 2023.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

Benzene (µg/L)

General Statistics

Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	9.7
Maximum	760
Mean	218.9
Geometric Mean	140.6
Median	180
Standard Deviation	186.6
Coefficient of Variation	0.852

Mann-Kendall Test

M-K Test Value (S)	25
Tabulated p-value	0.174
Standard Deviation of S	24.26
Standardized Value of S	0.989
Approximate p-value	0.161

Insufficient evidence to identify a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis	
User Selected Options		
Date/Time of Computation	ProUCL 5.2 1/25/2024 4:09:21 PM	
From File	MW-1 BTEX 2009 to 2023.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

Ethylbenzene (µg/L)

General Statistics

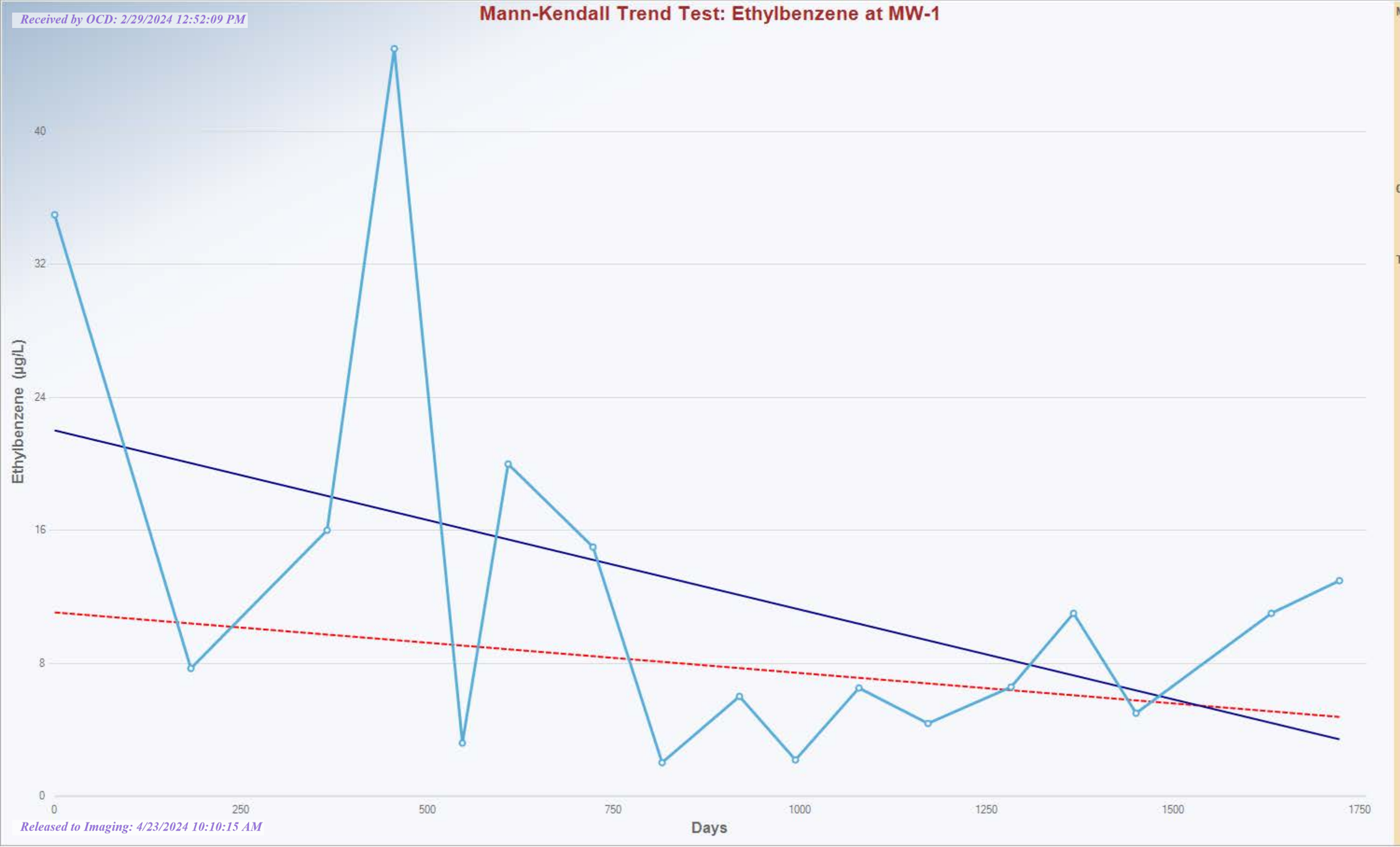
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1.8
Maximum	270
Mean	30.91
Geometric Mean	14.81
Median	15
Standard Deviation	50.91
Coefficient of Variation	1.647

Mann-Kendall Test

M-K Test Value (S)	-214
Critical Value (0.05)	-1.645
Standard Deviation of S	64.51
Standardized Value of S	-3.302
Approximate p-value	4.8017E-4

Statistically significant evidence of a decreasing trend at the specified level of significance.

Mann-Kendall Trend Test: Ethylbenzene at MW-1



Mann-Kendall Trend Analysis

n	17
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	24.2556
Standardized Value of S	-0.8246
M-K Test Value (S)	-21
Tabulated p-value	0.2200
Approximate p-value	0.2048

OLS Regression Line (Blue)

OLS Regression Slope	-0.0108
OLS Regression Intercept	22.0457

Theil-Sen Trend Line (Red)

Theil-Sen Slope	-0.0036
Theil-Sen Intercept	11.0445

Insufficient statistical evidence of a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis	
User Selected Options		
Date/Time of Computation	ProUCL 5.2 1/25/2024 4:17:30 PM	
From File	MW-1 BTEX 2019 to 2023.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

Ethylbenzene (µg/L)

General Statistics

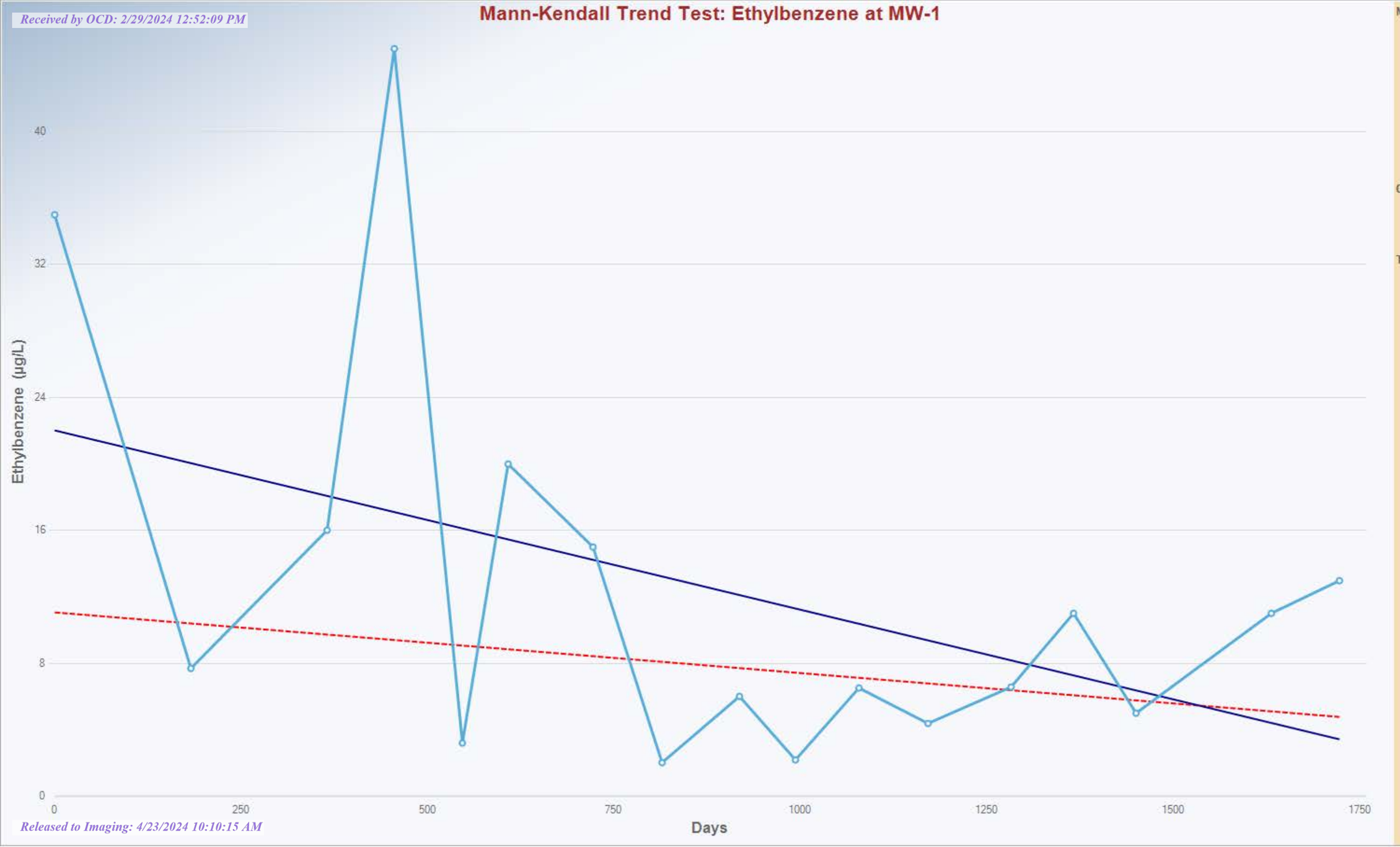
Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	2
Maximum	45
Mean	12.33
Geometric Mean	8.573
Median	7.7
Standard Deviation	11.73
Coefficient of Variation	0.952

Mann-Kendall Test

M-K Test Value (S)	-21
Tabulated p-value	0.22
Standard Deviation of S	24.26
Standardized Value of S	-0.825
Approximate p-value	0.205

Insufficient evidence to identify a significant trend at the specified level of significance.

Mann-Kendall Trend Test: Ethylbenzene at MW-1



Mann-Kendall Trend Analysis

n	17
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	24.2556
Standardized Value of S	-0.8246
M-K Test Value (S)	-21
Tabulated p-value	0.2200
Approximate p-value	0.2048

OLS Regression Line (Blue)

OLS Regression Slope	-0.0108
OLS Regression Intercept	22.0457

Theil-Sen Trend Line (Red)

Theil-Sen Slope	-0.0036
Theil-Sen Intercept	11.0445

Insufficient statistical evidence of a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis	
User Selected Options		
Date/Time of Computation	ProUCL 5.2 1/25/2024 4:17:30 PM	
From File	MW-1 BTEX 2019 to 2023.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

Ethylbenzene (µg/L)

General Statistics

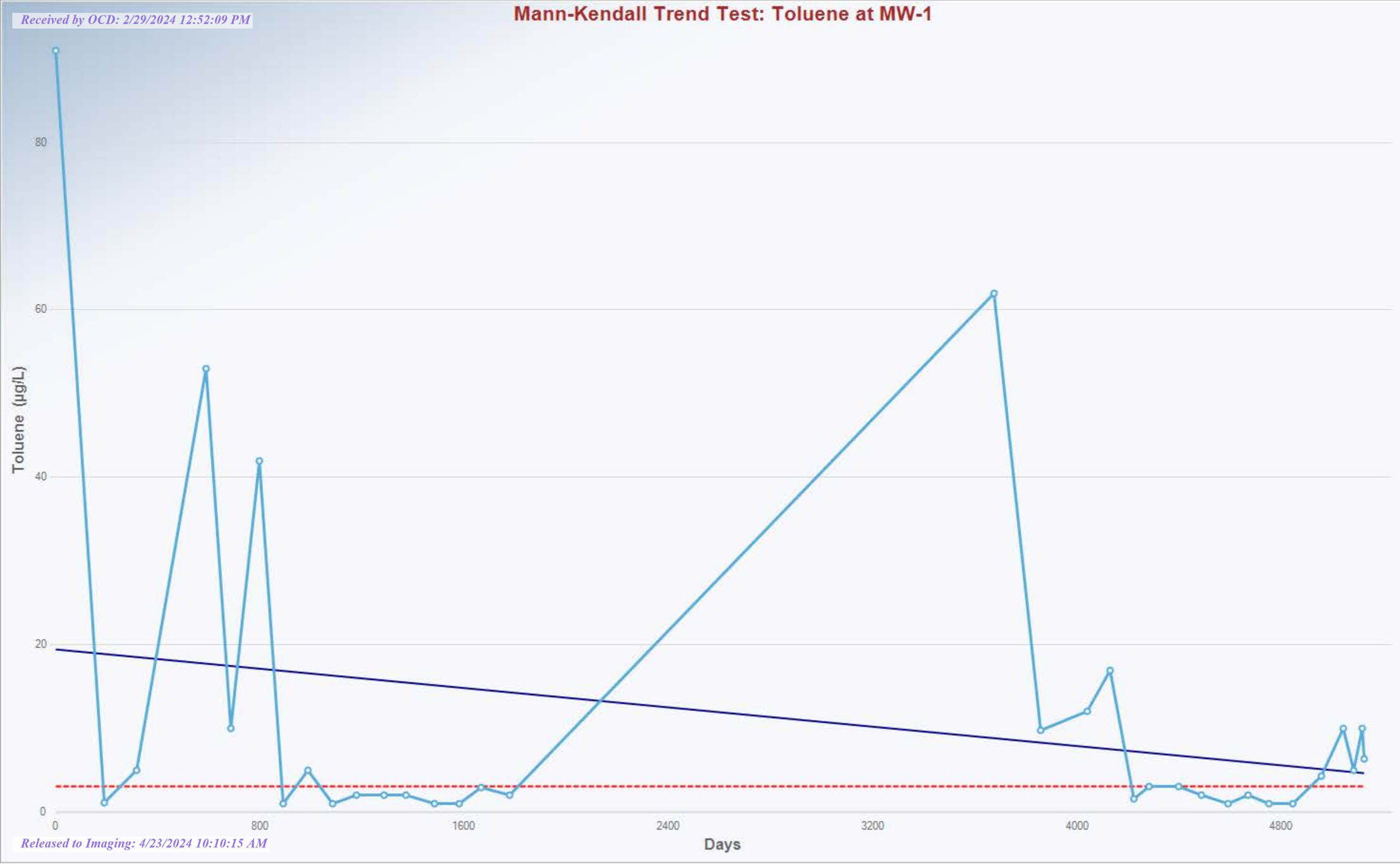
Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	2
Maximum	45
Mean	12.33
Geometric Mean	8.573
Median	7.7
Standard Deviation	11.73
Coefficient of Variation	0.952

Mann-Kendall Test

M-K Test Value (S)	-21
Tabulated p-value	0.22
Standard Deviation of S	24.26
Standardized Value of S	-0.825
Approximate p-value	0.205

Insufficient evidence to identify a significant trend at the specified level of significance.

Mann-Kendall Trend Test: Toluene at MW-1



Mann-Kendall Trend Analysis

n	33
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	64.0000
Standardized Value of S	-0.3906
M-K Test Value (S)	-26
Appx. Critical Value (0.05)	-1.6449
Approximate p-value	0.3480

OLS Regression Line (Blue)

OLS Regression Slope	-0.0029
OLS Regression Intercept	19.4717

Theil-Sen Trend Line (Red)

Theil-Sen Slope	0.0000
Theil-Sen Intercept	3.1000

Insufficient statistical evidence of a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis	
User Selected Options		
Date/Time of Computation	ProUCL 5.2 1/25/2024 4:07:13 PM	
From File	MW-1 BTEX 2009 to 2023.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

Toluene (µg/L)

General Statistics

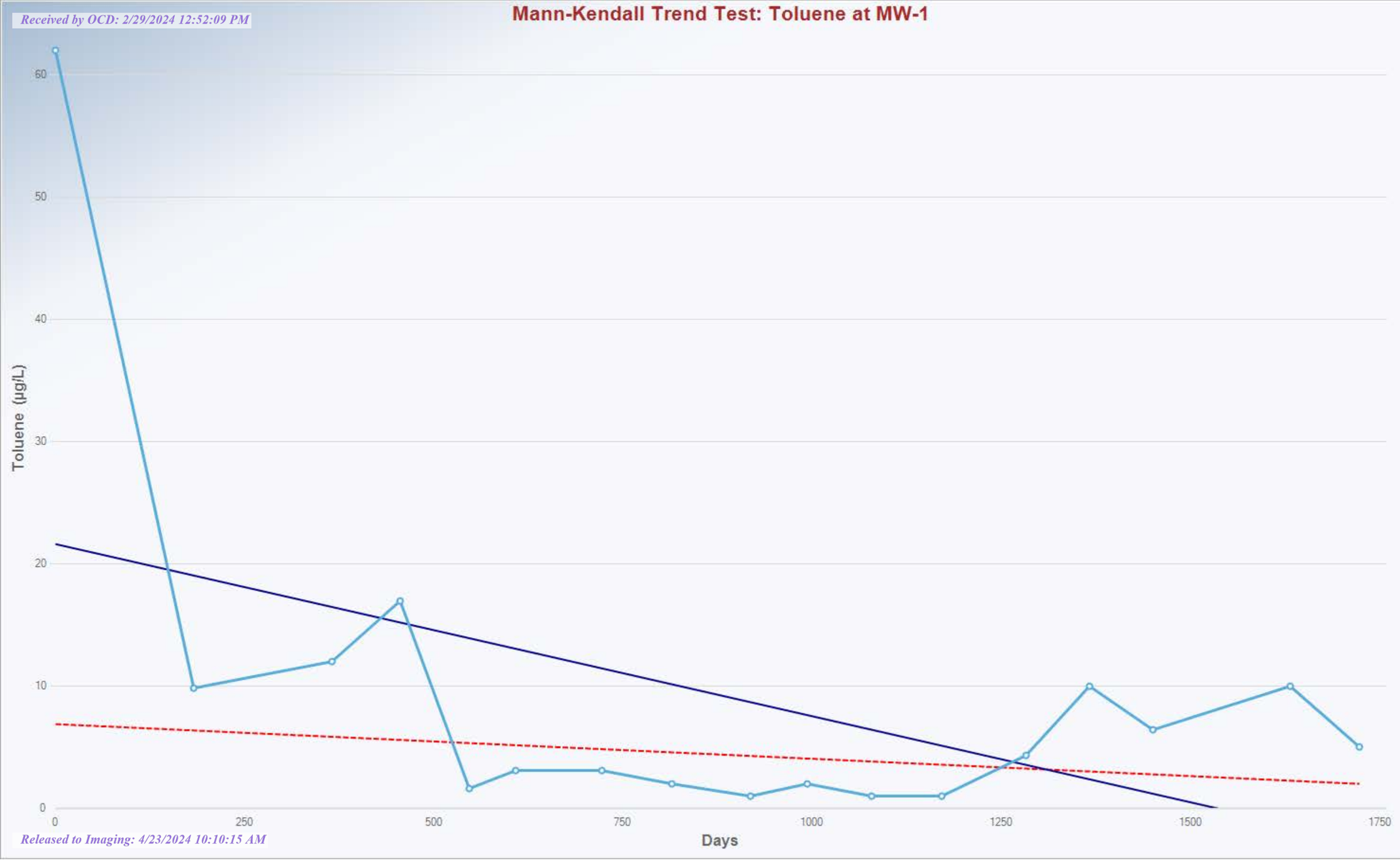
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	1
Maximum	91
Mean	11.32
Geometric Mean	4.167
Median	3.1
Standard Deviation	20.54
Coefficient of Variation	1.815

Mann-Kendall Test

M-K Test Value (S)	-26
Critical Value (0.05)	-1.645
Standard Deviation of S	64
Standardized Value of S	-0.391
Approximate p-value	0.348

Insufficient evidence to identify a significant trend at the specified level of significance.

Mann-Kendall Trend Test: Toluene at MW-1



Mann-Kendall Trend Analysis

n	17
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	24.1385
Standardized Value of S	-0.7871
M-K Test Value (S)	-20
Tabulated p-value	0.2200
Approximate p-value	0.2156

OLS Regression Line (Blue)

OLS Regression Slope	-0.0141
OLS Regression Intercept	21.6088

Theil-Sen Trend Line (Red)

Theil-Sen Slope	-0.0028
Theil-Sen Intercept	6.8937

Insufficient statistical evidence of a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis	
User Selected Options		
Date/Time of Computation	ProUCL 5.2 1/25/2024 4:16:04 PM	
From File	MW-1 BTEX 2019 to 2023.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

Toluene (µg/L)

General Statistics

Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	1
Maximum	62
Mean	8.9
Geometric Mean	4.449
Median	4.3
Standard Deviation	14.46
Coefficient of Variation	1.624

Mann-Kendall Test

M-K Test Value (S)	-20
Tabulated p-value	0.22
Standard Deviation of S	24.14
Standardized Value of S	-0.787
Approximate p-value	0.216

Insufficient evidence to identify a significant trend at the specified level of significance.

Mann-Kendall Trend Test: Total Xylenes at MW-1

Mann-Kendall Trend Analysis

n	33
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	64.4283
Standardized Value of S	-0.4656
M-K Test Value (S)	-31
Appx. Critical Value (0.05)	-1.6449
Approximate p-value	0.3207

OLS Regression Line (Blue)

OLS Regression Slope	-0.0004
OLS Regression Intercept	64.5430

Theil-Sen Trend Line (Red)

Theil-Sen Slope	-0.0018
Theil-Sen Intercept	31.6828

Insufficient statistical evidence of a significant trend at the specified level of significance.

	Mann-Kendall Trend Test Analysis	
User Selected Options		
Date/Time of Computation	ProUCL 5.2 1/25/2024 4:11:00 PM	
From File	MW-1 BTEX 2009 to 2023.xls	
Full Precision	OFF	
Confidence Coefficient	0.95	
Level of Significance	0.05	

Total Xylenes (µg/L)

General Statistics

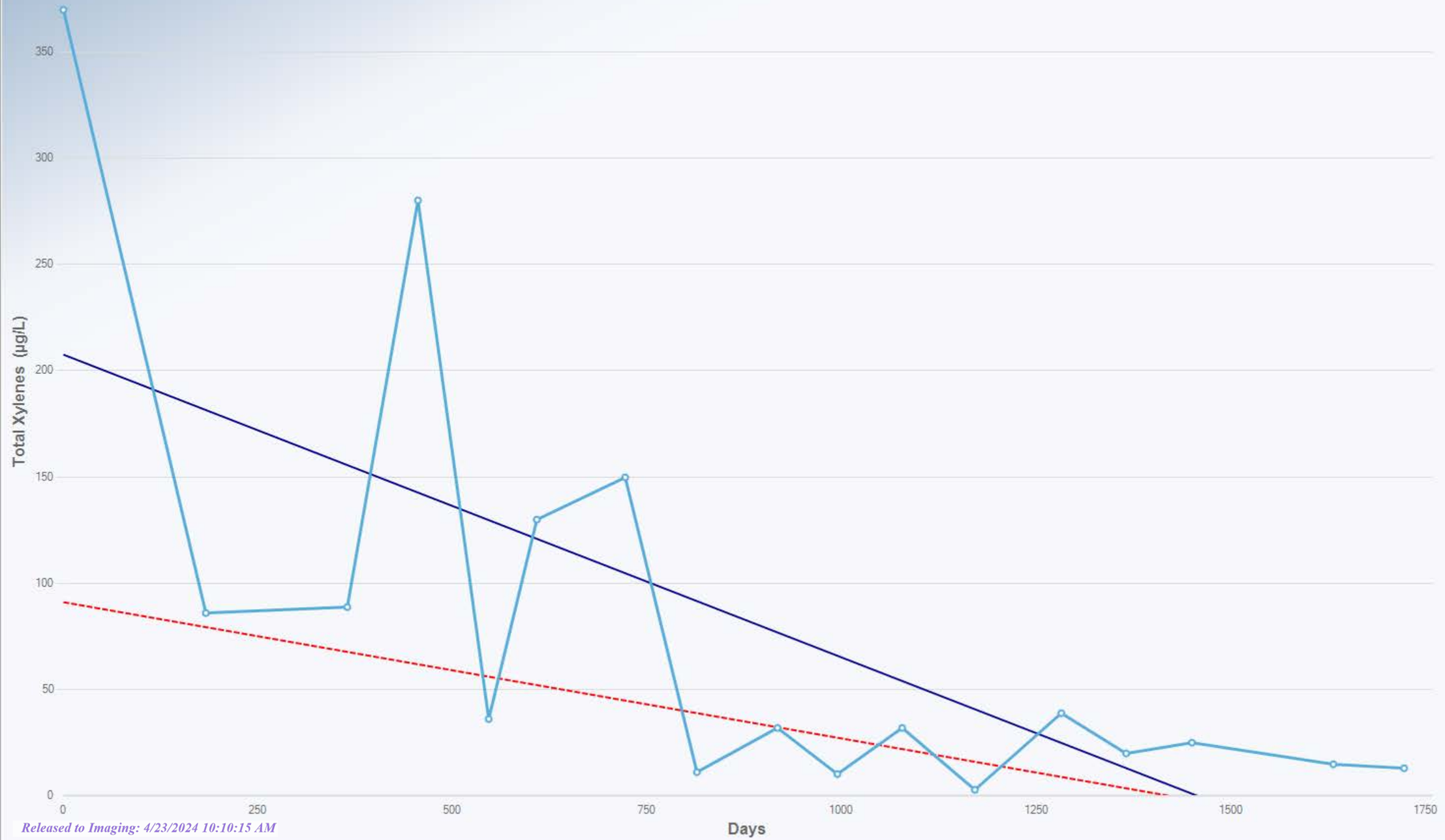
Number of Events Reported (m)	33
Number of Missing Events	0
Number or Reported Events Used	33
Number Values Reported (n)	33
Minimum	2
Maximum	370
Mean	63.3
Geometric Mean	22.18
Median	25
Standard Deviation	88.6
Coefficient of Variation	1.4

Mann-Kendall Test

M-K Test Value (S)	-31
Critical Value (0.05)	-1.645
Standard Deviation of S	64.43
Standardized Value of S	-0.466
Approximate p-value	0.321

Insufficient evidence to identify a significant trend at the specified level of significance.

Mann-Kendall Trend Test: Total Xylenes at MW-1



Mann-Kendall Trend Analysis

n	17
Confidence Coefficient	0.9500
Level of Significance	0.0500
Standard Deviation of S	24.2556
Standardized Value of S	-2.8859
M-K Test Value (S)	-71
Tabulated p-value	0.0020
Approximate p-value	0.0020

OLS Regression Line (Blue)

OLS Regression Slope	-0.1427
OLS Regression Intercept	207.4176

Theil-Sen Trend Line (Red)

Theil-Sen Slope	-0.0645
Theil-Sen Intercept	91.1681

Statistically significant evidence of a decreasing trend at the specified level of significance.

1	Mann-Kendall Trend Test Analysis	
2	User Selected Options	
3	Date/Time of Computation	ProUCL 5.2 1/25/2024 4:30:07 PM
4	From File	MW-1 BTEX 2019 to 2023.xls
5	Full Precision	OFF
6	Confidence Coefficient	0.95
7	Level of Significance	0.05

Total Xylenes (µg/L)

General Statistics

Number of Events Reported (m)	17
Number of Missing Events	0
Number or Reported Events Used	17
Number Values Reported (n)	17
Minimum	3
Maximum	370
Mean	78.88
Geometric Mean	37.99
Median	32
Standard Deviation	103.3
Coefficient of Variation	1.31

Mann-Kendall Test

M-K Test Value (S)	-71
Tabulated p-value	0.002
Standard Deviation of S	24.26
Standardized Value of S	-2.886
Approximate p-value	0.00195

Statistically significant evidence of a decreasing trend at the specified level of significance.

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 319074

CONDITIONS

Operator: BENSON-MONTIN-GREER DRILLING CORP 4900 College Blvd. Farmington, NM 87402	OGRID: 2096
	Action Number: 319074
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the Q1 through Q4 Annual Progress Report for Highway 537 Truck Receiving Station: Content Satisfactory 1. Proceed with plans to sample VOCs quarterly, Phenols and dissolved manganese annually 2. Gauge all wells for depth to groundwater and water quality parameters annually 3. Replace MW-1 sock on an as needed basis 4. Submit next groundwater monitoring report and site status update by April 1, 2025.	4/23/2024