May 10, 2021

APPROVED
By Nelson Velez at 9:08 am, Jan 06, 2022

Review of Q1 through Q4 2020 Progress Report: Content satisfactory

1. Follow recommendations stated within the aforementioned report to conduct groundwater monitoring and sampling in MW-1.
a. Quarterly: Volatile organics (USEPA Method 8260)
b. Annual: Phenols (SW-846 9067) and dissolved manganese (USEPA Method 200.7)
c. Gauge all wells for depth to groundwater on a quarterly basis
d. Measure water quality parameters in all wells on an annual basis
e. Replace absorbent sock in MW-1 if needed
f. Submit the next progress report to the OCD no later than March 31, 2022

Cory Smith
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: Q1 through Q4 2020 Progress Report
Benson-Montin-Greer
Highway 537 Llaves Pipeline 2008 Release
Rio Arriba County, New Mexico
AP-136 (Formerly 3RP-447)

Dear Mr. Smith:

On behalf of Benson-Montin-Greer Drilling Corporation (BMG), Animas Environmental Services, LLC (AES) has prepared this Comprehensive 2020 Progress Report, which details Q1 through Q4 2020 activities at the BMG Llaves Pipeline 2008 Release location. Site activities were conducted in accordance with a Stage 1 and 2 Abatement Plan dated June 6, 2019, and Plan approval is currently pending. Field work and reporting delays were encountered during the COVID-19 pandemic; however, it is anticipated that progress reports will be submitted on a quarterly basis beginning in 2021 and in accordance with the 2019 Abatement Plan.

1.0 Site Information

1.1 Site Location

The 2008 release originated on the Schmitz Ranch, on the south side of Highway 537 and flowed south and southwest through a small unnamed arroyo for a distance of approximately 920 linear feet (ft). This arroyo eventually drains to the Los Ojitos Arroyo, which ultimately drains to Largo Canyon. The release location is legally described as being located within the NW¼ NE¼ Section 18, T25N, R3W in Rio Arriba County, New Mexico. Latitude and longitude were recorded as being N36.40357 and W107.18422, 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

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topographic quadrangle, is included as Figure 1, and a general site plan is presented as Figure 2.

1.2 Release History

December 31, 2007 - A Western Refining truck driver discovered the Llaves pipeline leak and immediately contacted BMG. BMG personnel confirmed the release and shut down the Llaves pipeline pumps and block valve located about one mile upstream. BMG contracted with TNT Excavating to remove the oil that had pooled along the surface of the small arroyo. Approximately 40 barrels (bbls) of oil were recovered and placed in storage tanks at the BMG Hwy 537 Transfer Station. A total of 3,932 cubic yards of contaminated soils were excavated and transported to the TNT Landfarm facility for disposal.

January 9, 2008 - Llaves pipeline was repaired. BMG notified the National Response Center of the spill on January 23, 2008, and the release was given identification number 860429.

1.3 Site Investigation and Initial Monitor Well Installation

April and May 2008 - A total of 15 soil borings (TH-1 through TH-15) and nine groundwater monitor wells (TH-3/MW-1 through TH-11/MW-9) were installed by AES between April 14 and 16, 2008. Soils were found to consist of interbedded layers of brown silty clay, poorly sorted tan sands, and very moist plastic brown clays, and groundwater was found to exist about 28 to 35 feet bgs. The locations of the monitoring wells are presented on Figure 2.

Soil petroleum hydrocarbon contamination was evident in TH-1 (below the area of excavation) and in TH-2 (between the excavation and the service road). TH-13, located within the small arroyo, was also impacted by contaminated soils. Soil contaminant concentrations exceeded NMOCD action levels for benzene, toluene, ethylbenzene, and xylene (BTEX) in TH-1 and TH-2, and for total petroleum hydrocarbons (TPH) in TH-1, TH-2, and TH-13. The highest total BTEX concentrations and total TPH concentrations were reported at 479 mg/kg and 29,000 mg/kg, respectively, at 34 feet bgs in TH-2.

AES conducted baseline groundwater sampling on May 5, 2008. Groundwater analytical results showed that groundwater was impacted above the New Mexico Water Quality Control Commission (WQCC) standard for benzene in MW-8 (26 µg/L) and MW-9 (6.2 µg/L). Monitor wells MW-1, MW-7, MW-8, and MW-9 had TPH-GRO concentrations above laboratory detection limits. Details of the site investigation were presented in the

Site Investigation Report dated June 23, 2008 (AES, 2008), and *Corrective Action Plan* dated October 25, 2010 (AES, 2010), both submitted to NMOCD.

March 21-22 and April 14, 2011 – On March 21 and 22, 2011, AES installed five remediation wells, MPE-1 through MPE-5, in and around the area of the release, primarily in the area of MW-9. AES returned to install two additional MPE wells, MPE-6 and MPE-7, at the site on April 14, 2011. The locations of the remediation wells are presented on Figure 2. Installation details were presented in the *Periodic Progress Report* submitted to NMOCD and dated August 10, 2011 (AES, 2011).

1.4 Groundwater Monitoring and Sampling – 2008 to 2019

Monitor wells MW-1 through MW-7 were monitored and sampled from 2008 to 2011 and had dissolved phase concentrations which remained below laboratory detection limits or applicable standards for BTEX for eight consecutive quarters. Well MW-8 was monitored and sampled from 2008 to 2013 and had dissolved phase BTEX concentrations below laboratory detection limits for nine consecutive quarters.

Groundwater monitoring and measurement of NAPL was conducted on a periodic basis between 2014 and 2019. MW-9/MW-9R and MPE-1 through MPE-6 continued to have measurable NAPL thicknesses. MPE-7, which is hydraulically down-gradient, had measurable NAPL only in April 2014 (0.01 ft). 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 NAPL Recovery –2011 to 2019

1.5.1 Multi-Phase Extraction (MPE) Operations, 2011

The MPE unit was installed in May 2011 and operated until October 2011, when it was removed for the winter season. An estimated **26,250 lbs** of petroleum hydrocarbons were removed via the RSI mobile MPE system.

1.5.2 Additional MPE Operations, 2014 and 2015

In 2014 and 2015, AES re-installed an RSI mobile MPE system to remove residual contaminants. The unit operated from July to September 2014 and from May 8 to August 6, 2015. It is estimated that approximately **7,172 lbs** and **7,052 lbs** of petroleum hydrocarbons were removed during this time.

1.5.3 Residual NAPL Recovery Efforts – December 2017 to April 2019

AES conducted residual NAPL recovery though hand-bailing at the site, with events occurring on a monthly basis from December 2017 through April 2019. Wells included in hand-bailing efforts are MPE-1 through MPE-6 and MW-9.

Because of the low transmissivity of residual NAPL, a total of 5.4 gallons (approximately 33 lbs) were removed from the site from January through April 2019. The cumulative mass of petroleum hydrocarbons removed through 2019 (including 2011, 2014, and 2015 mechanical operations) is approximately 41,421 lbs (6,796 gallons).

Petroleum Hydrocarbon Mass Removal 2011 through 2019
BMG Hwy 537 2008 Release

Time Period	*Mass Petroleum Hydrocarbons Removed (lbs)*
Through August 2015	40,474
August 2015 to April 2019	947
Cumulative Mass Removal (lbs)	***41,421***

Cumulative depth to groundwater and NAPL measurements are presented in Table 1. Further details are presented in the *2018 Annual Report* (AES, 2019).

1.6 Monitor Well Plugging and Abandonment – August 2017

On August 7, 2017, AES, with approval from NMOCD and with approved Well Plugging Plans from the New Mexico Office of the State Engineer (NMOSE), oversaw the plugging and abandonment (P&A) of six of the existing monitor wells, including MW-1, MW-3, MW-4, MW-5, MW-6 and MW-8. Note that two wells, MW-7 (upgradient) and MW-2 (downgradient), were left open to measure depth to groundwater and to assist in calculating hydraulic gradient. P&A activities were detailed in the *Remedial Activities Update Report* dated September 1, 2017 (AES, 2017).

1.7 NAPL Recovery Pilot Study – August to September 2017

AES conducted a pilot study utilizing low vacuum enhancement to promote NAPL migration to the recovery wells. The Hwy 537 2008 Release pilot study was performed in two phases, passive skimming recovery (August 2017) and low vacuum enhanced recovery (September 2017). Phase I results were reported in the *Remedial Activities Update Report,* dated September 1, 2017 (AES, 2017). Phase II results resulted in insufficient NAPL migration to the recovery wells (i.e. decreased NAPL transmissivity) and MPE operations continuing to be less than effective at addressing the residual NAPL mass.

1.8 Abatement Plan 2019

A pending Stage 1 and 2 Abatement Plan dated June 6, 2019 has been submitted to NMOCD. As required by New Mexico Administrative Code (NMAC) 19.15.30.11, this plan was requested from NMOCD in correspondence dated March 18, 2019.

The purpose of a Stage 1 Abatement Plan is to design and conduct a site investigation that adequately defines site conditions, and to provide the data necessary to select and design an effective abatement option. The plan proposed that previous site data and associated reports adequately defined site conditions, thereby meeting the requirements of a Stage 1 Abatement Plan.

The proposed activities of the Stage 2 Abatement Plan included replacement monitor well MW-9R installation and sampling, installation of a solar-powered low vacuum NAPL recovery system, groundwater monitoring and sampling, and compliance soil sampling.

1.8.1 MW-9R Installation and Groundwater Sampling, September 2019

On September 5, 2019, AES installed one groundwater monitor well, MW-9R, to replace MW-9, a 0.75-inch well which has been blocked by roots since December 2018. On September 6, 2019, the well was developed, and on September 25, 2019, groundwater samples were collected from MW-9R and other site wells for laboratory analysis.

1.8.2 Solar Sipper Installation, October 2019

A Geotech® Solar Sipper was installed at the site for recovery of residual NAPL on October 24 and 25, 2019. The solar sipper was taken off-line on December 11, 2019, and returned to service on March 10, 2020.

2.0 Quarterly Progress Summaries, Q1 through Q4 2020

2.1 Q1 2020

Groundwater gauging of site wells and sampling of monitor well MW-9R was conducted by AES on March 10 and 25, 2020. All groundwater measurement, purge volumes and water quality readings (where obtainable) were recorded onto Water Sample Collection Forms, which are included in Appendix A.

One solar sipper was returned to service at MPE-1 on March 10, 2020, and the second skimmer was also placed in MPE-6. A total of 5.93 gallons of residual NAPL had been recovered as of March 25, 2020.

Groundwater Elevations and Water Quality Measurements

On March 10, 2020, depth to groundwater at the site ranged from 34.74 ft bgs at MPE-2 to 37.92 ft bgs at MPE-5. NAPL was observed in four of the six monitored wells: MPE-1 (0.43 ft), MPE-3 (1.84 ft), MPE-5 (0.70 ft), and MPE-6 (0.05 ft); and was not recorded in MW-9R and MPE-2.

The depth to groundwater at the site on March 25, 2020, ranged from 34.45 ft bgs at MPE-3 to 37.21 ft bgs at MPE-5. Well MW-2 was dry. NAPL was recorded in six of the 10 on-site wells: MW-9R (0.05 ft), MPE-1 (0.63 ft), MPE-2 (0.01 ft), MPE-3 (1.79 ft), MPE-5 (0.62 ft), and MPE-6 (0.16 ft). NAPL has historically been recorded in MPE-4 but a well casing shift at approximately 35.32 ft bgs prevented measurement. Field water quality measurements were obtained from MW-7.

Groundwater gradient is historically to the southwest. Groundwater elevations are summarized in Table 1, and groundwater elevation and contours are presented in Figure 3. NAPL contours are presented on Figure 4.

Groundwater Laboratory Analyses

After bailing NAPL to a sheen, groundwater samples from MW-9R were submitted to Hall in Albuquerque, New Mexico, for analysis of the following parameters listed in NMAC 20.6.2.3103(A, B, and C):

- BTEX per USEPA Method 8021B;
- TPH (GRO/DRO/MRO) per USEPA Method 8015; and
- Dissolved iron and manganese per USEPA Method 6010B.

All samples were preserved in laboratory-supplied containers and stored in an insulated cooler containing ice. Samples were shipped by Hall personnel in chilled and insulated coolers at less than 6°C to the analytical laboratory.

Groundwater Laboratory Analytical Results

Groundwater analytical results for dissolved phase BTEX concentrations were reported below laboratory detection limits or the applicable WQCC standards in MW-9R. TPH as GRO (0.66 mg/L) and DRO (1.2 mg/L) were reported, and TPH-MRO levels were below laboratory detection limits. Dissolved iron (1.9 mg/L) and manganese (2.5 mg/L) levels exceeded the respective dissolved WQCC standards of 1.0 mg/L and 0.2 mg/L. Groundwater analytical results are tabulated in Tables 2 and 3 and are also presented on Figure 5. The laboratory analytical report is included in Appendix B.

2.2 Q2 2020

Groundwater gauging of all site wells and sampling of monitor wells MW-7 and MW-9R was conducted by AES on June 23, 2020. All groundwater measurement, purge volumes and water quality readings (where obtainable) were recorded onto Water Sample Collection Forms, which are included in Appendix A.

Groundwater Elevations and Water Quality Measurements

On June 23, 2020, depth to groundwater at the site ranged from 33.12 ft bgs at MPE-7 to 40.85 ft bgs at MW-7. Well MW-2 was dry. NAPL was recorded in 6 of the 10 on-site wells: MW-9R (0.07 ft), MPE-1 (0.90 ft), MPE-2 (less than 0.01 ft), MPE-3 (1.18 ft), MPE-5 (0.68 ft), and MPE-6 (0.95 ft). NAPL has historically been recorded in MPE-4, but a recent deformation in the well casing prevented measurement. Field water quality measurements were obtained from MW-7. Groundwater gradient is historically to the southwest. Groundwater elevations are summarized in Table 1, and groundwater elevation and contours are presented in Figure 6. NAPL contours are presented on Figure 7.

Groundwater Laboratory Analyses

After bailing residual NAPL to a sheen, groundwater samples from MW-9R were submitted to Hall in Albuquerque, New Mexico, for analysis of the following parameters listed in NMAC 20.6.2.3103(A, B, and C):

- BTEX per USEPA Method 8260; and
- TPH (GRO/DRO/MRO) per USEPA Method 8015.

In addition, groundwater samples from MW-7 were submitted to Hall for analysis of:

- Dissolved iron and manganese per USEPA Method 6010B.

Insufficient water was available at MW-7 to collect laboratory samples for total dissolved solids (TDS). All samples were preserved in laboratory-supplied containers and stored in an insulated cooler containing ice. Samples were shipped by Hall personnel in chilled and insulated coolers at less than 6°C to the analytical laboratory.

Groundwater Laboratory Analytical Results

Groundwater analytical results for MW-9R dissolved phase BTEX concentrations were reported below laboratory detection limits or the applicable WQCC standards. TPH was detected as GRO (0.86 mg/L), DRO (46 mg/L), and MRO (20 mg/L). MW-7 dissolved iron

(0.11 mg/L) and manganese (0.18 mg/L) levels were below the respective dissolved WQCC standards of 1.0 mg/L and 0.2 mg/L. Groundwater analytical results are tabulated in Tables 2 and 3 and are also presented on Figure 8. The laboratory analytical report is included in Appendix B.

2.3 Q3 2020

Groundwater gauging of site wells and sampling of monitor well MW-9R was conducted by AES on September 23, 2020. All groundwater measurement, purge volumes and water quality readings (where obtainable) were recorded onto Water Sample Collection Forms, which are included in Appendix A.

Groundwater Elevations and Water Quality Measurements

On September 23, 2020, depth to groundwater at the site ranged from 33.43 ft bgs at MPE-7 to 41.14 ft bgs at MW-7. Well MW-2 remained dry. NAPL was recorded in 6 of the 10 wells: MW-9R (0.29 ft), MPE-1 (0.90 ft), MPE-2 (0.01 ft), MPE-3 (1.53 ft), MPE-5 (0.63 ft), and MPE-6 (0.95 ft). Groundwater elevations are summarized in Table 1, and groundwater elevation and contours are presented in Figure 9. NAPL contours are presented on Figure 10.

Groundwater Laboratory Analyses

After bailing NAPL to a sheen, groundwater samples from MW-9R were submitted to Hall in Albuquerque, New Mexico, for analysis of the following parameters listed in NMAC 20.6.2.3103(A, B, and C):

- BTEX per USEPA Method 8260; and
- TPH (GRO/DRO/MRO) per USEPA Method 8015.

All samples were preserved in laboratory-supplied containers and stored in an insulated cooler containing ice. Samples were shipped by Hall personnel in chilled and insulated coolers at less than 6°C to the analytical laboratory.

Groundwater Laboratory Analytical Results

Groundwater analytical results for MW-9R dissolved phase BTEX concentrations were reported below laboratory detection limits or the applicable WQCC standards. TPH was detected as GRO (3.8 mg/L), DRO (550 mg/L), and MRO (270 mg/L).

Groundwater analytical results are tabulated in Tables 2 and 3 and are also presented on Figure 11. The laboratory analytical report is included in Appendix B.

2.4 Q4 2020

Groundwater gauging of all site wells and sampling of monitor well MW-9R was conducted by AES on November 23, 2020. All groundwater measurement, purge volumes and water quality readings (where obtainable) were recorded onto Water Sample Collection Forms included in Appendix A.

Groundwater Elevations and Water Quality Measurements

On November 23, 2020, depth to groundwater at the site ranged from 33.34 ft bgs at MPE-7 to 41.16 ft bgs at MW-7. Well MW-2 was dry. NAPL was recorded in 6 of the 10 wells: MW-9R (0.15 ft), MPE-1 (0.85 ft), MPE-2 (0.02 ft), MPE-3 (0.39 ft), MPE-5 (0.59 ft), and MPE-6 (0.60 ft). Groundwater gradient is historically to the southwest. Groundwater elevations are summarized in Table 1, and groundwater elevation and contours are presented in Figure 12. NAPL contours are presented on Figure 13.

Groundwater Laboratory Analyses

After bailing NAPL to a sheen, groundwater samples from MW-9R were submitted for analysis of the following parameters listed in NMAC 20.6.2.3103 (A, B, and C):

- BTEX per USEPA Method 8260; and
- TPH (GRO/DRO/MRO) per USEPA Method 8015.

All samples were preserved in laboratory-supplied containers and stored in an insulated cooler containing ice. Samples were shipped by Hall personnel in chilled and insulated coolers at less than 6°C to the analytical laboratory.

Groundwater Laboratory Analytical Results

Groundwater analytical results for MW-9R dissolved phase BTEX concentrations were reported below laboratory detection limits or the applicable WQCC standards. TPH was detected as GRO (1.0 mg/L), DRO (250 mg/L), and MRO (120 mg/L).

Groundwater analytical results are tabulated in Tables 2 and 3 and are also presented on Figure 14. The laboratory analytical report is included in Appendix B.

2.5 NAPL Recovery 2020

A total of 7.62 gallons of NAPL was recovered by the solar sipper units during 2020 based on calculations made using storage tank gauging information. The very low NAPL transmissivity rate has resulted in low recovery rates. Currently the unit is set to cycle no more than twice daily in order to maintain enough NAPL in the wells for operation while minimizing the amount of groundwater that is recovered.

4.0 Conclusions

On March 25, June 23, September 23, and November 23, 2020, groundwater gauging was conducted, and samples were collected from MW-9R for laboratory analysis. Groundwater samples were also collected from MW-7 on June 23, 2020 (Q2 2020) for dissolved metals analyses.

Based on March through November 2020 field observations and laboratory analytical results, the following is concluded:

1. Depth to groundwater at the site ranged from 33.34 ft bgs at MPE-7 to 41.16 ft bgs at MW-7 in November 2020. Well MW-2 was dry during all sampling events.

2. Residual NAPL was observed in six wells during all sampling events. In November 2020 (Q4 2020) these were MW-9R (0.15 ft), MPE-1 (0.85 ft), MPE-2 (0.02 ft), MPE-3 (0.39 ft), MPE-5 (0.59 ft), and MPE-6 (0.60 ft).

3. MW-9R dissolved iron (1.9 mg/L) and dissolved manganese (2.5 mg/L) levels in March 2020 exceeded the respective WQCC standards of 1.0 mg/L and 0.2 mg/L. In contrast, upgradient MW-7 dissolved iron (0.11 mg/L) and dissolved manganese (0.18 mg/L) concentrations in June 2020 were below WQCC standards. Groundwater concentrations were either below laboratory detection limits or below applicable WQCC standards for all other parameters analyzed during all 2020 sampling events.

Two solar sippers installed at the site for recovery of residual NAPL have been in operation since March 10, 2020. A total of 12.1 gallons of NAPL had been recovered as of November 23, 2020.

5.0 Scheduled Site Activities

The following site activities are currently scheduled for 2021:

- Ongoing recovery of residual NAPL via solar sipper from wells where NAPL recovery is sufficient for removal;

- **March 2021** - Semi-annual gauging events of the remaining monitor wells, MW-2, MW-7 and MW-9R; Sampling of MW-9R for volatile organic compounds (VOCs) per USEPA 8260 and TPH (GRO, DRO, MRO) per USEPA 8015.
- **June 2021** – Solar sipper O&M and recovery optimization; redevelop wells to see if transmissivity and recovery of residual NAPL is improved.
- **September 2021** - Semi-annual gauging events of the remaining monitor wells, MW-2, MW-7 and MW-9R; Sampling of MW-9R for VOCs per USEPA 8260 and TPH (GRO, DRO, MRO) per USEPA 8015. Sample MW-7 (upgradient well) for TDS because there was not enough volume to previously include this analysis.
- **December 2021** – Solar sipper O&M and recovery optimization if the equipment is still in place for the season.

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

Respectfully Submitted,

David J. Reese
Environmental Scientist

Eddie Hubbert
Environmental Scientist/Project Lead

Elizabeth McNally, P.E.

Tables

Table 1. Summary of Groundwater Measurement and Water Quality Data
Table 2. Summary of Groundwater Analytical Results – VOCs and TPH

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2. General Site Plan
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4. Residual NAPL Thickness Contours, March 2020
5. Groundwater Contaminant Concentrations, March 2020
6. Groundwater Elevation Contours, June 2020
7. Residual NAPL Thickness Contours, June 2020
8. Groundwater Contaminant Concentrations, June 2020
9. Groundwater Elevation Contours, September 2020
10. Residual NAPL Thickness Contours, September 2020
11. Groundwater Contaminant Concentrations, September 2020
12. Groundwater Elevation Contours, November 2020
13. Residual NAPL Thickness Contours, November 2020
14. Groundwater Contaminant Concentrations, November 2020

Appendices

A. Water Sample Collection Forms
B. Laboratory Analytical Reports (Hall Nos. 2003C85, 2006C00, 2009E81, and 2011C53)

Cc: Zach Stradling (*zstradling@bmgdrilling.com*)
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bmgprojectsnon-spcc/Shared Documents/Hwy 537 2008/Reports and Workplans/Annual 2020 Progress Report 051021.docx

Tables

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 LLAVES PIPELINE 2008 OIL RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-1	14-Jan-14	7082.57		33.51		7049.06	NM	NM	NM	NM	NM
MW-1	04-Apr-14	7082.57		33.50		7049.07	NM	NM	NM	NM	NM
MW-1	10-Sep-14	7082.57		33.75		7048.82	NM	NM	NM	NM	NM
MW-1	03-Dec-14	7082.57		33.83		7048.74	NM	NM	NM	NM	NM
MW-1	27-Mar-15	7082.57		33.64		7048.93	NM	NM	NM	NM	NM
MW-1	08-Dec-15	7082.57		33.84		7048.73	NM	NM	NM	NM	NM
MW-1	17-Jun-16	7082.57		33.91		7048.66	NM	NM	NM	NM	NM
MW-1	20-Oct-16	7082.57		34.20		7048.37	NM	NM	NM	NM	NM
MW-1	27-Jan-17	7082.57		34.12		7048.45	NM	NM	NM	NM	NM
MW-1	07-Aug-17	7082.57	Plugged and Abandoned								
MW-2	14-Jan-14	7079.94		31.28		7048.66	NM	NM	NM	NM	NM
MW-2	04-Apr-14	7079.94		31.15		7048.79	NM	NM	NM	NM	NM
MW-2	10-Sep-14	7079.94		Dry		NA	NM - WELL DRY				
MW-2	03-Dec-14	7079.94		Dry		NA	NM - WELL DRY				
MW-2	27-Mar-15	7079.94		Dry		NA	NM - WELL DRY				
MW-2	08-Dec-15	7079.94		Dry		NA	NM - WELL DRY				
MW-2	17-Jun-16	7079.94		Dry		NA	NM - WELL DRY				
MW-2	20-Oct-16	7079.94		Dry		NA	NM - WELL DRY				
MW-2	27-Jan-17	7079.94		Dry		NA	NM - WELL DRY				
MW-2	14-Apr-17	7079.94		Dry		NA	NM - WELL DRY				
MW-2	25-Sep-19	7079.94		Dry		NA	NM - WELL DRY				
MW-2	25-Mar-20	7079.94		Dry		NA	NM - WELL DRY				
MW-2	23-Jun-20	7079.94		Dry		NA	NM - WELL DRY				
MW-2	23-Sep-20	7079.94		Dry		NA	NM - WELL DRY				

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 LLAVES PIPELINE 2008 OIL RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-2	23-Nov-20	7079.94		Dry		NA	NM - WELL DRY				
MW-3	14-Jan-14	7081.10		31.77		7049.33	NM	NM	NM	NM	NM
MW-3	04-Apr-14	7081.10		31.66		7049.44	NM	NM	NM	NM	NM
MW-3	10-Sep-14	7081.10		32.19		7048.91	NM	NM	NM	NM	NM
MW-3	03-Dec-14	7081.10		32.18		7048.92	NM	NM	NM	NM	NM
MW-3	27-Mar-15	7081.10		31.78		7049.32	NM	NM	NM	NM	NM
MW-3	08-Dec-15	7081.10		32.12		7048.98	NM	NM	NM	NM	NM
MW-3	17-Jun-16	7081.10		32.21		7048.89	NM	NM	NM	NM	NM
MW-3	20-Oct-16	7081.10		32.47		7048.63	NM	NM	NM	NM	NM
MW-3	27-Jan-17	7081.10		32.36		7048.74	NM	NM	NM	NM	NM
MW-3	07-Aug-17	7081.10	Plugged and Abandoned								
MW-4	14-Jan-14	7084.79		34.85		7049.94	NM	NM	NM	NM	NM
MW-4	04-Apr-14	7084.79		34.84		7049.95	NM	NM	NM	NM	NM
MW-4	10-Sep-14	7084.79		35.14		7049.65	NM	NM	NM	NM	NM
MW-4	03-Dec-14	7084.79		35.21		7049.58	NM	NM	NM	NM	NM
MW-4	27-Mar-15	7084.79		35.04		7049.75	NM	NM	NM	NM	NM
MW-4	08-Dec-15	7084.79		35.28		7049.51	NM	NM	NM	NM	NM
MW-4	17-Jun-16	7084.79		35.31		7049.48	NM	NM	NM	NM	NM
MW-4	20-Oct-16	7084.79		35.54		7049.25	NM	NM	NM	NM	NM
MW-4	27-Jan-17	7084.79		35.52		7049.27	NM	NM	NM	NM	NM
MW-4	07-Aug-17	7084.79	Plugged and Abandoned								
MW-5	05-May-08	7087.98		Dry		NA	NM - WELL DRY				
MW-5	24-Sep-08	7087.98		Dry		NA	NM - WELL DRY				

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 LLAVES PIPELINE 2008 OIL RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-5	02-Jan-09	7087.98		Dry		NA	NM - WELL DRY				
MW-5	07-Apr-09	7087.98		Dry		NA	NM - WELL DRY				
MW-5	07-Jul-09	7087.98		Dry		NA	NM - WELL DRY				
MW-5	12-Oct-09	7087.98		Dry		NA	NM - WELL DRY				
MW-5	12-Jan-10	7087.98		Dry		NA	NM - WELL DRY				
MW-5	13-Oct-10	7087.98		Dry		NA	NM - WELL DRY				
MW-5	20-Jan-11	7087.98		Dry		NA	NM - WELL DRY				
MW-5	09-May-11	7087.98		Dry		NA	NM - WELL DRY				
MW-5	15-Aug-11	7087.98		Dry		NA	NM - WELL DRY				
MW-5	21-Nov-11	7087.98		Dry		NA	NM - WELL DRY				
MW-5	21-Feb-12	7087.98		Dry		NA	NM - WELL DRY				
MW-5	24-May-12	7087.98		Dry		NA	NM - WELL DRY				
MW-5	18-Sep-12	7087.98		Dry		NA	NM - WELL DRY				
MW-5	04-Dec-12	7087.98		Dry		NA	NM - WELL DRY				
MW-5	26-Mar-13	7087.98		Dry		NA	NM - WELL DRY				
MW-5	26-Jun-13	7087.98		Dry		NA	NM - WELL DRY				
MW-5	25-Sep-13	7087.98		Dry		NA	NM - WELL DRY				
MW-5	14-Jan-14	7087.98		Dry		NA	NM - WELL DRY				
MW-5	04-Apr-14	7087.98		Dry		NA	NM - WELL DRY				
MW-5	10-Sep-14	7088.98		Dry		NA	NM - WELL DRY				
MW-5	03-Dec-14	7088.98		Dry		NA	NM - WELL DRY				
MW-5	27-Mar-15	7088.98		Dry		NA	NM - WELL DRY				
MW-5	08-Dec-15	7088.98		Dry		NA	NM - WELL DRY				
MW-5	17-Jun-16	7088.98		Dry		NA	NM - WELL DRY				
MW-5	20-Oct-16	7088.98		Dry		NA	NM - WELL DRY				
MW-5	27-Jan-17	7088.98		Dry		NA	NM - WELL DRY				

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 LLAVES PIPELINE 2008 OIL RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-5	07-Aug-17	7088.98	Plugged and Abandoned								
MW-6	14-Jan-14	7088.43		38.14		7050.29	NM	NM	NM	NM	NM
MW-6	04-Apr-14	7088.43		38.14		7050.29	NM	NM	NM	NM	NM
MW-6	10-Sep-14	7088.43		38.37		7050.06	NM	NM	NM	NM	NM
MW-6	03-Dec-14	7088.43		38.55		7049.88	NM	NM	NM	NM	NM
MW-6	27-Mar-15	7088.43		38.28		7050.15	NM	NM	NM	NM	NM
MW-6	08-Dec-15	7088.43		38.55		7049.88	NM	NM	NM	NM	NM
MW-6	17-Jun-16	7088.43		38.57		7049.86	NM	NM	NM	NM	NM
MW-6	20-Oct-16	7088.43		38.79		7049.64	NM	NM	NM	NM	NM
MW-6	27-Jan-17	7088.43		38.81		7049.62	NM	NM	NM	NM	NM
MW-6	07-Aug-17	7088.43	Plugged and Abandoned								
MW-7	14-Jan-14	7090.15		39.85		7050.30	NM	NM	NM	NM	NM
MW-7	04-Apr-14	7090.15		39.89		7050.26	NM	NM	NM	NM	NM
MW-7	10-Sep-14	7090.15		40.07		7050.08	NM	NM	NM	NM	NM
MW-7	03-Dec-14	7090.15		40.24		7049.91	NM	NM	NM	NM	NM
MW-7	27-Mar-15	7090.15		39.94		7050.21	NM	NM	NM	NM	NM
MW-7	08-Dec-15	7090.15		40.27		7049.88	NM	NM	NM	NM	NM
MW-7	17-Jun-16	7090.15		40.30		7049.85	NM	NM	NM	NM	NM
MW-7	20-Oct-16	7090.15		40.51		7049.64	NM	NM	NM	NM	NM
MW-7	27-Jan-17	7090.15		40.49		7049.66	NM	NM	NM	NM	NM
MW-7	14-Apr-17	7090.15		40.23		7049.92	NM	NM	NM	NM	NM
MW-7	25-Sep-19	7090.15		40.85		7049.30	NM	NM	NM	NM	NM
MW-7	25-Mar-20	7090.15		40.61		7049.54	12.5	2.00	1.78	7.13	168.9
MW-7	23-Jun-20	7090.15		40.85		7049.30	19.4	1.96	4.38	7.53	167.6

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 LLAVES PIPELINE 2008 OIL RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-7	23-Sep-20	7090.15		41.14		7049.01	NM	NM	NM	NM	NM
MW-7	23-Nov-20	7090.15		41.16		7048.99	NM	NM	NM	NM	NM
MW-8	14-Jan-14	7085.20		35.87		7049.33	NM	NM	NM	NM	NM
MW-8	04-Apr-14	7085.20		35.79		7049.41	NM	NM	NM	NM	NM
MW-8	10-Sep-14	7085.20		36.04		7049.16	NM	NM	NM	NM	NM
MW-8	03-Dec-14	7085.20		36.15		7049.05	NM	NM	NM	NM	NM
MW-8	27-Mar-15	7085.20		35.94		7049.26	NM	NM	NM	NM	NM
MW-8	08-Dec-15	7085.20		36.19		7049.01	NM	NM	NM	NM	NM
MW-8	17-Jun-16	7085.20		36.28		7048.92	NM	NM	NM	NM	NM
MW-8	20-Oct-16	7085.20		36.54		7048.66	NM	NM	NM	NM	NM
MW-8	27-Jan-17	7085.20		36.49		7048.71	NM	NM	NM	NM	NM
MW-8	07-Aug-17	7085.20	Plugged and Abandoned								
MW-9	05-May-08	7083.64		31.81		7051.83	15.01	1.955	2.59	7.85	-37.9
MW-9	24-Sep-08	7083.64		32.26		7051.38	14.03	1.515	2.84	7.08	43.3
MW-9	05-Jan-09	7083.64				7083.64	NM - WELL DRY				
MW-9	07-Apr-09	7083.64		32.34		7051.30	12.85	1.876	1.11	6.89	7.0
MW-9	07-Jul-09	7083.64		32.41		7051.23	16.77	1.672	1.14	7.19	-9.7
MW-9	12-Oct-09	7083.64		32.63		7051.01	13.78	1.352	2.10	7.22	72.9
MW-9	12-Jan-10	7083.64	32.43	34.80	2.37	7050.68	NM - 2.37 feet NAPL				
MW-9	13-Oct-10	7083.64	32.63	35.29	2.66	7050.42	NM - 2.66 feet NAPL				
MW-9	20-Jan-11	7083.64	32.71	35.21	2.50	7050.38	NM - 2.50 feet NAPL				
MW-9	09-May-11	7083.64	32.43	34.96	2.53	7050.65	NM - 2.53 feet NAPL				
MW-9	15-Aug-11	7083.64	33.11	35.33	2.22	7050.04	NM - 2.22 feet NAPL				
MW-9	07-Oct-11	7083.64	33.14	35.23	2.09	7050.04	NM - 2.09 feet NAPL				

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BMG HWY 537 LLAVES PIPELINE 2008 OIL RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MW-9	21-Nov-11	7083.64	33.25	35.37	2.12	7049.92	NM - 2.12 feet NAPL				
MW-9	21-Feb-12	7083.64	33.14	35.06	1.92	7050.07	NM - 1.92 feet NAPL				
MW-9	24-May-12	7083.64	33.15	35.19	2.04	7050.04	NM - 2.04 feet NAPL				
MW-9	18-Sep-12	7083.64	33.47	35.26	1.79	7049.77	NM - 1.79 feet NAPL				
MW-9	04-Dec-12	7083.64	33.68	35.64	1.96	7049.52	NM - 1.96 feet NAPL				
MW-9	26-Mar-13	7083.64	33.53	35.22	1.69	7049.73	NM - 1.69 feet NAPL				
MW-9	26-Jun-13	7083.64	33.70	35.27	1.57	7049.59	NM - 1.57 feet NAPL				
MW-9	25-Sep-13	7083.64	32.96	36.46	3.50	7049.90	NM - 3.50 feet NAPL				
MW-9	14-Jan-14	7083.64	33.95	34.31	0.36	7049.61	NM - 0.36 feet NAPL				
MW-9	04-Apr-14	7083.64	33.94	34.01	0.07	7049.68	NM - 0.07 feet NAPL				
MW-9	10-Sep-14	7083.64	34.15	34.27	0.12	7049.46	NM - 0.12 feet NAPL				
MW-9	03-Dec-14	7083.64	34.25	34.31	0.06	7049.38	NM - 0.06 feet NAPL				
MW-9	27-Mar-15	7083.64	33.96	34.03	0.07	7049.66	NM - 0.07 feet NAPL				
MW-9	08-Dec-15	7083.64	34.30	34.36	0.06	7049.33	NM - 0.01 feet NAPL				
MW-9	17-Jun-16	7083.64	34.50	34.51	0.01	7049.14	NM - 0.01 feet NAPL				
MW-9	20-Oct-16	7083.64	34.63	34.90	0.27	7048.95	NM - 0.27 feet NAPL				
MW-9	27-Jan-17	7083.64	34.62	35.12	0.50	7048.91	NM - 0.50 feet NAPL				
MW-9	14-Apr-17	7083.64	34.32	34.87	0.55	7049.20	NM - 0.55 feet NAPL				
MW-9	21-Jun-17	7083.64	34.25	35.81	1.56	7049.04	NM - 1.56 feet NAPL				
MW-9	09-Aug-17	7083.64	34.32	36.68	2.36	7048.80	NM - 2.36 feet NAPL				
MW-9	07-Dec-17	7083.64	34.29	36.68	2.39	7048.82	NM - 2.39 feet NAPL				
MW-9	09-Jan-18	7083.64	34.19	36.59	2.40	7048.92	NM - 2.40 feet NAPL				
MW-9	18-Feb-18	7083.64	34.27	36.65	2.38	7048.84	NM - 2.38 feet NAPL				
MW-9	05-Mar-18	7083.64	34.26	36.52	2.26	7048.88	NM - 2.26 feet NAPL				
MW-9	05-Apr-18	7083.64	34.34	36.27	1.93	7048.87	NM - 1.93 feet NAPL				
MW-9	18-May-18	7083.64	34.26	36.49	2.23	7048.88	NM - 2.23 feet NAPL				

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MW-9	12-Jun-18	7083.64	34.45	36.72	2.27	7048.69	NM - 2.27 feet NAPL				
MW-9	09-Jul-18	7083.64	34.55	36.88	2.33	7048.57	NM - 2.33 feet NAPL				
MW-9	13-Aug-18	7083.64	34.56	36.76	2.20	7048.59	NM - 2.20 feet NAPL				
MW-9	24-Sep-18	7083.64	34.68	36.87	2.19	7048.47	NM - 2.19 feet NAPL				
MW-9	26-Oct-18	7083.64	34.73	36.90	2.17	7048.43	NM - 2.17 feet NAPL				
MW-9	19-Nov-18	7083.64	34.74	37.00	2.26	7048.40	NM - 2.26 feet NAPL				
MW-9	14-Dec-18	7083.64	34.85	37.00	2.15	7048.31	NM - 2.15 feet NAPL				
MW-9R	25-Sep-19	TBS		35.32		NA	13.6	1.413	1.41	6.65	24.9
MW-9R	10-Mar-20	TBS	--	35.20	--	NA	Not Measured				
MW-9R	25-Mar-20	TBS	35.07	35.12	0.05	NA	NM - 0.05 feet NAPL				
MW-9R	23-Jun-20	TBS	35.30	35.37	0.07	NA	NM - 0.07 feet NAPL				
MW-9R	23-Sep-20	TBS	35.57	35.86	0.29	NA	NM - 0.29 feet NAPL				
MW-9R	23-Nov-20	TBS	35.55	35.70	0.15	NA	NM - 0.15 feet NAPL				
MPE-1	14-Jan-14	TBS	35.12	37.44	2.32	NA	NM - 2.32 feet NAPL				
MPE-1	04-Apr-14	TBS	35.10	37.40	2.30	NA	NM - 2.30 feet NAPL				
MPE-1	10-Sep-14	TBS	35.36	37.70	2.34	NA	NM - 2.34 feet NAPL				
MPE-1	03-Dec-14	TBS	35.44	37.77	2.33	NA	NM - 2.33 feet NAPL				
MPE-1	09-Oct-15	TBS	35.48	37.37	1.89	NA	NM - 1.89 feet NAPL				
MPE-1	27-Mar-15	TBS	35.22	37.29	2.07	NA	NM - 2.07 feet NAPL				
MPE-1	09-Oct-15	TBS	35.48	37.37	1.89	NA	NM - 1.89 feet NAPL				
MPE-1	08-Dec-15	TBS	35.58	37.60	2.02	NA	NM - 2.02 feet NAPL				
MPE-1	17-Jun-16	TBS	35.62	37.72	2.10	NA	NM - 2.10 feet NAPL				
MPE-1	20-Oct-16	TBS	35.84	38.05	2.21	NA	NM - 2.21 feet NAPL				
MPE-1	27-Jan-17	TBS	35.80	37.88	2.08	NA	NM - 2.08 feet NAPL				

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MPE-1	14-Apr-17	TBS	35.58	37.37	1.79	NA	NM - 1.79 feet NAPL				
MPE-1	21-Jun-17	TBS	35.74	37.65	1.91	NA	NM - 1.91 feet NAPL				
MPE-1	09-Aug-17	TBS	35.96	37.50	1.54	NA	NM - 1.54 feet NAPL				
MPE-1	07-Dec-17	TBS	35.83	37.69	1.86	NA	NM - 1.86 feet NAPL				
MPE-1	09-Jan-18	TBS	35.79	37.69	1.90	NA	NM - 1.90 feet NAPL				
MPE-1	12-Feb-18	TBS	35.85	37.19	1.34	NA	NM - 1.34 feet NAPL				
MPE-1	05-Mar-18	TBS	35.93	37.06	1.13	NA	NM - 1.13 feet NAPL				
MPE-1	05-Apr-18	TBS	35.95	37.23	1.28	NA	NM - 1.28 feet NAPL				
MPE-1	18-May-18	TBS	35.92	37.40	1.48	NA	NM - 1.48 feet NAPL				
MPE-1	12-Jun-18	TBS	36.10	37.35	1.25	NA	NM - 1.25 feet NAPL				
MPE-1	09-Jul-18	TBS	36.23	37.30	1.07	NA	NM - 1.07 feet NAPL				
MPE-1	13-Aug-18	TBS	36.33	37.17	0.84	NA	NM - 0.84 feet NAPL				
MPE-1	24-Sep-18	TBS	36.44	36.98	0.54	NA	NM - 0.54 feet NAPL				
MPE-1	26-Oct-18	TBS	36.51	36.75	0.24	NA	NM - 0.24 feet NAPL				
MPE-1	19-Nov-18	TBS	36.54	36.86	0.32	NA	NM - 0.32 feet NAPL				
MPE-1	14-Dec-18	TBS	36.63	36.78	0.15	NA	NM - 0.15 feet NAPL				
MPE-1	25-Sep-19	TBS	36.19	38.11	1.92	NA	NM - 1.92 feet NAPL				
MPE-1	10-Mar-20	TBS	36.93	37.36	0.43	NA	NM - 0.43 feet NAPL				
MPE-1	25-Mar-20	TBS	37.08	37.71	0.63	NA	NM - 0.63 feet NAPL				
MPE-1	23-Jun-20	TBS	37.60	38.50	0.90	NA	NM - 0.90 feet NAPL				
MPE-1	23-Sep-20	TBS	37.79	38.69	0.90	NA	NM - 0.90 feet NAPL				
MPE-1	23-Nov-20	TBS	37.84	38.69	0.85	NA	NM - 0.85 feet NAPL				
MPE-2	14-Jan-14	TBS	33.80	34.13	0.33	NA	NM - 0.33 feet NAPL				
MPE-2	04-Apr-14	TBS	33.74	34.03	0.29	NA	NM - 0.29 feet NAPL				
MPE-2	10-Sep-14	TBS	34.03	34.44	0.41	NA	NM - 0.41 feet NAPL				

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BMG HWY 537 LLAVES PIPELINE 2008 OIL RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MPE-2	03-Dec-14	TBS	34.10	34.55	0.45	NA	NM- - 0.45 feet NAPL				
MPE-2	09-Oct-15	TBS	34.07	34.43	0.36	NA	NM - 0.36 feet NAPL				
MPE-2	27-Mar-15	TBS	33.85	34.20	0.35	NA	NM - 0.35 feet NAPL				
MPE-2	09-Oct-15	TBS	34.07	34.43	0.36	NA	NM - 0.36 feet NAPL				
MPE-2	08-Dec-15	TBS	34.20	34.38	0.18	NA	NM - 0.18 feet NAPL				
MPE-2	17-Jun-16	TBS	34.31	34.43	0.12	NA	NM - 0.12 feet NAPL				
MPE-2	20-Oct-16	TBS	34.52	34.77	0.25	NA	NM - 0.75 feet NAPL				
MPE-2	27-Jan-17	TBS	34.48	34.73	0.25	NA	NM - 0.25 feet NAPL				
MPE-2	14-Apr-17	TBS	34.22	34.36	0.14	NA	NM - 0.14 feet NAPL				
MPE-2	21-Jun-17	TBS	34.36	34.62	0.26	NA	NM - 0.26 feet NAPL				
MPE-2	09-Aug-17	TBS	34.57	34.74	0.17	NA	NM - 0.17 feet NAPL				
MPE-2	07-Dec-17	TBS	34.47	34.62	0.15	NA	NM - 0.15 feet NAPL				
MPE-2	09-Jan-18	TBS	34.43	34.58	0.15	NA	NM - 0.15 feet NAPL				
MPE-2	12-Feb-18	TBS	34.41	34.50	0.09	NA	NM - 0.09 feet NAPL				
MPE-2	05-Mar-18	TBS	34.52	34.54	0.02	NA	NM - 0.02 feet NAPL				
MPE-2	05-Apr-18	TBS	34.52	34.57	0.05	NA	NM - 0.05 feet NAPL				
MPE-2	18-May-18	TBS	34.50	34.55	0.05	NA	NM - 0.05 feet NAPL				
MPE-2	12-Jun-18	TBS	34.67	34.79	0.12	NA	NM - 0.12 feet NAPL				
MPE-2	09-Jul-18	TBS	34.78	34.83	0.05	NA	NM - 0.05 feet NAPL				
MPE-2	13-Aug-18	TBS	34.83	34.87	0.04	NA	NM - 0.04 feet NAPL				
MPE-2	24-Sep-18	TBS	34.90	34.99	0.09	NA	NM - 0.09 feet NAPL				
MPE-2	26-Oct-18	TBS	34.95	35.00	0.05	NA	NM - 0.05 feet NAPL				
MPE-2	19-Nov-18	TBS	34.99	35.03	0.04	NA	NM - 0.04 feet NAPL				
MPE-2	14-Dec-18	TBS	35.03	35.09	0.06	NA	NM - 0.06 feet NAPL				
MPE-2	25-Sep-19	TBS	34.84	34.88	0.04	NA	NM - 0.04 feet NAPL				
MPE-2	10-Mar-20	TBS	--	34.74	--	NA	Not Measured				

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MPE-2	25-Mar-20	TBS	34.62	34.63	0.01	NA	NM - 0.01 feet NAPL				
MPE-2	23-Jun-20	TBS	34.85	34.85	0.00	NA	NM - <0.01 feet NAPL				
MPE-2	23-Sep-20	TBS	35.14	35.15	0.01	NA	NM - 0.01 feet NAPL				
MPE-2	23-Nov-20	TBS	35.11	35.13	0.02	NA	NM - 0.02 feet NAPL				
MPE-3	14-Jan-14	TBS	33.86	34.32	0.46	NA	NM - 0.46 feet NAPL				
MPE-3	04-Apr-14	TBS	33.83	34.18	0.35	NA	NM - 0.35 feet NAPL				
MPE-3	10-Sep-14	TBS	34.15	34.55	0.40	NA	NM - 0.40 feet NAPL				
MPE-3	03-Dec-14	TBS	34.20	34.57	0.37	NA	NM - 0.37 feet NAPL				
MPE-3	09-Oct-15	TBS	34.10	34.47	0.37	NA	NM - 0.37 feet NAPL				
MPE-3	27-Mar-15	TBS	33.96	34.20	0.24	NA	NM - 0.24 feet NAPL				
MPE-3	09-Oct-15	TBS	34.10	34.47	0.37	NA	NM - 0.37 feet NAPL				
MPE-3	08-Dec-15	TBS	34.28	34.56	0.28	NA	NM - 0.28 feet NAPL				
MPE-3	17-Jun-16	TBS	34.18	36.01	1.83	NA	NM - 1.83 feet NAPL				
MPE-3	20-Oct-16	TBS	34.35	36.53	2.18	NA	NM - 2.18 feet NAPL				
MPE-3	27-Jan-17	TBS	34.29	36.48	2.19	NA	NM - 2.19 feet NAPL				
MPE-3	14-Apr-17	TBS	34.05	35.85	1.80	NA	NM - 1.80 feet NAPL				
MPE-3	21-Jun-17	TBS	34.24	35.59	1.35	NA	NM - 1.35 feet NAPL				
MPE-3	09-Aug-17	TBS	34.39	36.39	2.00	NA	NM - 2.00 feet NAPL				
MPE-3	07-Dec-17	TBS	34.27	36.39	2.12	NA	NM - 2.12 feet NAPL				
MPE-3	09-Jan-18	TBS	34.22	36.33	2.11	NA	NM - 2.11 feet NAPL				
MPE-3	12-Feb-18	TBS	34.25	36.04	1.79	NA	NM - 1.79 feet NAPL				
MPE-3	05-Mar-18	TBS	34.40	35.81	1.41	NA	NM - 1.41 feet NAPL				
MPE-3	05-Apr-18	TBS	34.38	36.05	1.67	NA	NM - 1.67 feet NAPL				
MPE-3	18-May-18	TBS	34.43	36.11	1.68	NA	NM - 1.68 feet NAPL				
MPE-3	12-Jun-18	TBS	34.53	36.26	1.73	NA	NM - 1.73 feet NAPL				

TABLE 1
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BMG HWY 537 LLAVES PIPELINE 2008 OIL RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MPE-3	09-Jul-18	TBS	34.66	36.19	1.53	NA	NM - 1.53 feet NAPL				
MPE-3	13-Aug-18	TBS	34.73	36.15	1.42	NA	NM - 1.42 feet NAPL				
MPE-3	24-Sep-18	TBS	34.85	35.95	1.10	NA	NM - 1.10 feet NAPL				
MPE-3	26-Oct-18	TBS	34.90	35.95	1.05	NA	NM - 1.05 feet NAPL				
MPE-3	19-Nov-18	TBS	34.84	36.43	1.59	NA	NM - 1.59 feet NAPL				
MPE-3	14-Dec-18	TBS	34.90	36.48	1.58	NA	NM - 1.58 feet NAPL				
MPE-3	25-Sep-19	TBS	34.66	36.57	1.91	NA	NM - 1.91 feet NAPL				
MPE-3	10-Mar-20	TBS	34.55	36.39	1.84	NA	NM - 1.84 feet NAPL				
MPE-3	25-Mar-20	TBS	34.45	36.24	1.79	NA	NM - 1.79 feet NAPL				
MPE-3	23-Jun-20	TBS	34.87	36.05	1.18	NA	NM - 1.18 feet NAPL				
MPE-3	23-Sep-20	TBS	35.13	36.66	1.53	NA	NM - 1.53 feet NAPL				
MPE-3	23-Nov-20	TBS	35.19	35.58	0.39	NA	NM - 0.39 feet NAPL				
MPE-4	14-Jan-14	TBS	34.62	37.00	2.38	NA	NM - 2.38 feet NAPL				
MPE-4	04-Apr-14	TBS	34.59	36.91	2.32	NA	NM - 2.32 feet NAPL				
MPE-4	10-Sep-14	TBS	34.89	37.22	2.33	NA	NM - 2.33 feet NAPL				
MPE-4	03-Dec-14	TBS	34.95	37.30	2.35	NA	NM - 2.35 feet NAPL				
MPE-4	09-Oct-15	TBS	34.90	36.86	1.96	NA	NM - 1.96 feet NAPL				
MPE-4	27-Mar-15	TBS	34.73	36.82	2.09	NA	NM - 2.09 feet NAPL				
MPE-4	09-Oct-15	TBS	34.90	36.86	1.96	NA	NM - 1.96 feet NAPL				
MPE-4	08-Dec-15	TBS	35.09	37.17	2.08	NA	NM - 2.08 feet NAPL				
MPE-4	17-Jun-16	TBS	35.13	37.51	2.38	NA	NM - 2.38 feet NAPL				
MPE-4	20-Oct-16	TBS	35.38	37.83	2.45	NA	NM - 2.45 feet NAPL				
MPE-4	27-Jan-17	TBS	35.31	37.83	2.52	NA	NM - 2.52 feet NAPL				
MPE-4	14-Apr-17	TBS	35.06	37.16	2.10	NA	NM - 2.10 feet NAPL				
MPE-4	21-Jun-17	TBS	35.21	37.53	2.32	NA	NM - 2.32 feet NAPL				

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MPE-4	09-Aug-17	TBS	35.42	37.65	2.23	NA	NM - 2.23 feet NAPL				
MPE-4	07-Dec-17	TBS	35.53	37.53	2.00	NA	NM - 2.00 feet NAPL				
MPE-4	09-Jan-18	TBS	35.26	37.52	2.26	NA	NM - 2.26 feet NAPL				
MPE-4	12-Feb-18	TBS	35.31	37.15	1.84	NA	NM - 1.84 feet NAPL				
MPE-4	05-Mar-18	TBS	35.44	37.04	1.60	NA	NM - 1.60 feet NAPL				
MPE-4	05-Apr-18	TBS	35.47	37.03	1.56	NA	NM - 1.56 feet NAPL				
MPE-4	18-May-18	TBS	35.42	37.10	1.68	NA	NM - 1.68 feet NAPL				
MPE-4	12-Jun-18	TBS	35.73	36.58	0.85	NA	NM - 0.85 feet NAPL				
MPE-4	09-Jul-18	TBS	35.93	36.14	0.21	NA	NM - 0.21 feet NAPL				
MPE-4	13-Aug-18	TBS	35.99	36.04	0.05	NA	NM - 0.05 feet NAPL				
MPE-4	24-Sep-18	TBS	36.05	36.16	0.11	NA	NM - 0.11 feet NAPL				
MPE-4	26-Oct-18	TBS	36.11	36.17	0.06	NA	NM - 0.06 feet NAPL				
MPE-4	19-Nov-18	TBS	36.15	36.19	0.04	NA	NM - 0.04 feet NAPL				
MPE-4	14-Dec-18	TBS	36.21	36.26	0.05	NA	NM - 0.05 feet NAPL				
MPE-4	25-Sep-19	TBS	35.70	37.86	2.16	NA	NM - 2.16 feet NAPL				
MPE-4	25-Mar-20	TBS	--	--	--	NA	NM - Lower and Upper Portions of Well Not Aligned Due to Shift at Approximately 35.32 Ft				
MPE-4	23-Jun-20	TBS	--	--	--	NA					
MPE-4	23-Sep-20	TBS	--	--	--	NA	Well Damaged				
MPE-4	23-Nov-20	TBS	--	--	--	NA	Probe Obstructed at 35.28 Ft				
MPE-5	14-Jan-14	TBS	36.15	38.50	2.35	NA	NM - 2.35 feet NAPL				
MPE-5	04-Apr-14	TBS	36.15	38.32	2.17	NA	NM - 2.17 feet NAPL				
MPE-5	10-Sep-14	TBS	36.38	38.86	2.48	NA	NM - 2.48 feet NAPL				
MPE-5	03-Dec-14	TBS	36.49	38.91	2.42	NA	NM - 2.42 feet NAPL				
MPE-5	09-Oct-15	TBS	36.45	38.57	2.12	NA	NM - 2.12 feet NAPL				
MPE-5	27-Mar-15	TBS	36.27	38.28	2.01	NA	NM - 2.01 feet NAPL				

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Well ID	Date Sampled	Surveyed TOC (ft)	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	GW Elev. (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
MPE-5	09-Oct-15	TBS	36.45	38.57	2.12	NA	NM - 2.12 feet NAPL				
MPE-5	08-Dec-15	TBS	36.58	38.92	2.34	NA	NM - 2.34 feet NAPL				
MPE-5	17-Jun-16	TBS	36.66	38.90	2.24	NA	NM - 2.24 feet NAPL				
MPE-5	20-Oct-16	TBS	36.88	39.31	2.43	NA	NM - 2.43 feet NAPL				
MPE-5	27-Jan-17	TBS	36.84	39.20	2.36	NA	NM - 2.36 feet NAPL				
MPE-5	14-Apr-17	TBS	36.61	38.55	1.94	NA	NM - 1.94 feet NAPL				
MPE-5	21-Jun-17	TBS	36.75	38.82	2.07	NA	NM - 2.07 feet NAPL				
MPE-5	09-Aug-17	TBS	36.91	39.22	2.31	NA	NM - 2.31 feet NAPL				
MPE-5	26-Sep-17	TBS	37.09	38.65	1.56	NA	NM - 1.56 feet NAPL				
MPE-5	07-Dec-17	TBS	36.85	38.97	2.12	NA	NM - 2.12 feet NAPL				
MPE-5	09-Jan-18	TBS	36.79	38.88	2.09	NA	NM - 2.09 feet NAPL				
MPE-5	12-Feb-18	TBS	36.86	38.49	1.63	NA	NM - 1.63 feet NAPL				
MPE-5	05-Mar-18	TBS	36.96	38.46	1.50	NA	NM - 1.50 feet NAPL				
MPE-5	05-Apr-18	TBS	37.01	38.38	1.37	NA	NM - 1.37 feet NAPL				
MPE-5	18-May-18	TBS	37.03	38.07	1.04	NA	NM - 1.04 feet NAPL				
MPE-5	12-Jun-18	TBS	37.21	38.18	0.97	NA	NM - 0.97 feet NAPL				
MPE-5	09-Jul-18	TBS	37.33	38.13	0.80	NA	NM - 0.80 feet NAPL				
MPE-5	13-Aug-18	TBS	37.36	38.25	0.89	NA	NM - 0.89 feet NAPL				
MPE-5	24-Sep-18	TBS	37.42	38.37	0.95	NA	NM - 0.95 feet NAPL				
MPE-5	26-Oct-18	TBS	37.50	38.26	0.76	NA	NM - 0.76 feet NAPL				
MPE-5	19-Nov-18	TBS	37.52	38.41	0.89	NA	NM - 0.89 feet NAPL				
MPE-5	14-Dec-18	TBS	37.61	38.21	0.60	NA	NM - 0.60 feet NAPL				
MPE-5	25-Sep-19	TBS	37.43	37.97	0.54	NA	NM - 0.54 feet NAPL				
MPE-5	10-Mar-20	TBS	37.22	37.92	0.70	NA	NM - 0.70 feet NAPL				
MPE-5	25-Mar-20	TBS	37.21	37.83	0.62	NA	NM - 0.62 feet NAPL				
MPE-5	23-Jun-20	TBS	37.42	38.10	0.68	NA	NM - 0.68 feet NAPL				

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MPE-5	23-Sep-20	TBS	37.72	38.35	0.63	NA	NM - 0.63 feet NAPL				
MPE-5	23-Nov-20	TBS	37.70	38.29	0.59	NA	NM - 0.59 feet NAPL				
MPE-6	14-Jan-14	TBS	33.88	36.14	2.26	NA	NM - 2.26 feet NAPL				
MPE-6	04-Apr-14	TBS	33.82	36.10	2.28	NA	NM - 2.28 feet NAPL				
MPE-6	10-Sep-14	TBS	34.12	36.42	2.30	NA	NM - 2.30 feet NAPL				
MPE-6	03-Dec-14	TBS	34.20	36.50	2.30	NA	NM - 2.30 feet NAPL				
MPE-6	09-Oct-15	TBS	34.16	36.21	2.05	NA	NM - 2.05 feet NAPL				
MPE-6	27-Mar-15	TBS	33.97	35.95	1.98	NA	NM - 1.98 feet NAPL				
MPE-6	09-Oct-15	TBS	34.16	36.21	2.05	NA	NM - 2.05 feet NAPL				
MPE-6	08-Dec-15	TBS	34.63	36.68	2.05	NA	NM - 2.05 feet NAPL				
MPE-6	17-Jun-16	TBS	34.36	36.65	2.29	NA	NM - 2.29 feet NAPL				
MPE-6	20-Oct-16	TBS	34.62	36.80	2.18	NA	NM - 2.18 feet NAPL				
MPE-6	27-Jan-17	TBS	34.55	36.76	2.21	NA	NM - 2.21 feet NAPL				
MPE-6	14-Apr-17	TBS	34.30	36.20	1.90	NA	NM - 1.90 feet NAPL				
MPE-6	21-Jun-17	TBS	34.45	36.60	2.15	NA	NM - 2.15 feet NAPL				
MPE-6	09-Aug-17	TBS	34.71	36.44	1.73	NA	NM - 1.73 feet NAPL				
MPE-6	07-Dec-17	TBS	34.60	36.56	1.96	NA	NM - 1.96 feet NAPL				
MPE-6	09-Jan-18	TBS	34.51	36.54	2.03	NA	NM - 2.03 feet NAPL				
MPE-6	12-Feb-18	TBS	34.58	36.08	1.50	NA	NM - 1.50 feet NAPL				
MPE-6	05-Mar-18	TBS	34.73	35.81	1.08	NA	NM - 1.08 feet NAPL				
MPE-6	05-Apr-18	TBS	34.73	36.02	1.29	NA	NM - 1.29 feet NAPL				
MPE-6	18-May-18	TBS	34.68	36.13	1.45	NA	NM - 1.45 feet NAPL				
MPE-6	12-Jun-18	TBS	34.95	35.76	0.81	NA	NM - 0.81 feet NAPL				
MPE-6	09-Jul-18	TBS	35.10	35.60	0.50	NA	NM - 0.50 feet NAPL				
MPE-6	13-Aug-18	TBS	35.17	35.50	0.33	NA	NM - 0.33 feet NAPL				

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MPE-6	24-Sep-18	TBS	35.27	35.48	0.21	NA	NM - 0.21 feet NAPL				
MPE-6	26-Oct-18	TBS	35.30	35.56	0.26	NA	NM - 0.26 feet NAPL				
MPE-6	19-Nov-18	TBS	35.06	35.34	0.28	NA	NM - 0.28 feet NAPL				
MPE-6	14-Dec-18	TBS	35.40	35.60	0.20	NA	NM - 0.20 feet NAPL				
MPE-6	25-Sep-19	TBS	35.13	35.93	0.80	NA	NM - 0.80 feet NAPL				
MPE-6	10-Mar-20	TBS	35.81	35.86	0.05	NA	NM - 0.05 feet NAPL				
MPE-6	25-Mar-20	TBS	35.01	35.17	0.16	NA	NM - 0.16 feet NAPL				
MPE-6	23-Jun-20	TBS	35.12	36.07	0.95	NA	NM - 0.95 feet NAPL				
MPE-6	23-Sep-20	TBS	35.39	36.34	0.95	NA	NM - 0.95 feet NAPL				
MPE-6	23-Nov-20	TBS	35.37	36.27	0.60	NA	NM - 0.60 feet NAPL				
MPE-7	14-Jan-14	TBS		NM		NA	NM	NM	NM	NM	NM
MPE-7	04-Apr-14	TBS	32.00	32.01	0.01	NA	NM - 0.01 feet NAPL				
MPE-7	10-Sep-14	TBS		32.34		NA	NM	NM	NM	NM	NM
MPE-7	03-Dec-14	TBS		32.41		NA	NM	NM	NM	NM	NM
MPE-7	09-Oct-15	TBS		32.29		NA	NM	NM	NM	NM	NM
MPE-7	27-Mar-15	TBS		32.14		NA	NM	NM	NM	NM	NM
MPE-7	09-Oct-15	TBS		32.29		NA	NM	NM	NM	NM	NM
MPE-7	08-Dec-15	TBS		32.47		NA	NM	NM	NM	NM	NM
MPE-7	17-Jun-16	TBS		32.56		NA	NM	NM	NM	NM	NM
MPE-7	20-Oct-16	TBS		32.79		NA	NM	NM	NM	NM	NM
MPE-7	27-Jan-17	TBS		32.76		NA	NM	NM	NM	NM	NM
MPE-7	25-Sep-19	TBS		33.12		NA	NM	NM	NM	NM	NM
MPE-7	25-Mar-20	TBS		32.85		NA	NM	NM	NM	NM	NM
MPE-7	23-Jun-20	TBS		33.12		NA	NM	NM	NM	NM	NM

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MPE-7	23-Sep-20	TBS		33.43		NA	NM	NM	NM	NM	NM
MPE-7	23-Nov-20	TBS		33.34		NA	NM	NM	NM	NM	NM

NOTE: **Table includes only data from 2014 through present; comprehensive table available upon request.

NA - NOT AVAILABLE
NM - NOT MEASURED
NS - NOT SAMPLED
TBS - TO BE SURVEYED

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -
VOLATILE ORGANICS AND PETROLEUM HYDROCARBONS
BMG HWY 537 LLAVES PIPELINE 2008 OIL 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		**8021/8260**	**8021/826**	**8021/8260**	**8021/8260**	**8015D**	**8015M/D**	**8015M/D**
New Mexico WQCC		***5***	***1000***	***700***	***620***	***NE***	***NE***	***NE***
MW-1	05-May-08	<1.0	<1.0	<1.0	<2.0	0.092	<1.0	<5.0
MW-1	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	02-Jan-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	07-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	07-Jul-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	12-Oct-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	12-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	13-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	20-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	10-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	07-Aug-17	Plugged and Abandoned						
MW-2	05-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	02-Jan-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	07-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	07-Jul-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	12-Oct-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	12-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	13-Oct-10	NS - Well Filled with Roots						
MW-2	20-Jan-11	NS - Well Filled with Roots						
MW-2	10-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	05-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	02-Jan-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	07-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	07-Jul-09	NS - Well filled with sediment						
MW-3	12-Oct-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	12-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	13-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	20-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	10-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	07-Aug-17	Plugged and Abandoned						
MW-4	05-May-08	<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 LLAVES PIPELINE 2008 OIL 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		**8021/8260**	**8021/826**	**8021/8260**	**8021/8260**	**8015D**	**8015M/D**	**8015M/D**
New Mexico WQCC		***5***	***1000***	***700***	***620***	***NE***	***NE***	***NE***
MW-4	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	02-Jan-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	07-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	07-Jul-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	12-Oct-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	12-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	13-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	20-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	09-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	07-Aug-17	Plugged and Abandoned						
MW-5	05-May-08	NS - Well Dry						
MW-5	24-Sep-08	NS - Well Dry						
MW-5	02-Jan-09	NS - Well Dry						
MW-5	07-Apr-09	NS - Well Dry						
MW-5	07-Jul-09	NS - Well Dry						
MW-5	12-Oct-09	NS - Well Dry						
MW-5	12-Jan-10	NS - Well Dry						
MW-5	13-Oct-10	NS - Well Dry						
MW-5	20-Jan-11	NS - Well Dry						
MW-5	09-May-11	NS - Well Dry						
MW-5	07-Aug-17	Plugged and Abandoned						
MW-6	05-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	02-Jan-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	07-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	07-Jul-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	12-Oct-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	12-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	13-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	20-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	09-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	07-Aug-17	Plugged and Abandoned						
MW-7	05-May-08	2.8	<1.0	<1.0	<2.0	0.40	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -
VOLATILE ORGANICS AND PETROLEUM HYDROCARBONS
BMG HWY 537 LLAVES PIPELINE 2008 OIL 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		**8021/8260**	**8021/826**	**8021/8260**	**8021/8260**	**8015D**	**8015M/D**	**8015M/D**
New Mexico WQCC		***5***	***1000***	***700***	***620***	***NE***	***NE***	***NE***
MW-7	24-Sep-08	<1.0	<1.0	<1.0	<2.0	0.069	<1.0	<5.0
MW-7	02-Jan-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	07-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	07-Jul-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	12-Oct-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	12-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	13-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	20-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	09-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	05-May-08	**26**	10	<1.0	<2.0	1.10	<1.0	<5.0
MW-8	24-Sep-08	**65**	26	<1.0	<2.0	0.90	<1.0	<5.0
MW-8	05-Jan-09	**45**	25	<1.0	2.2	1.0	<1.0	<5.0
MW-8	07-Apr-09	**25**	20	<1.0	2.9	0.89	<1.0	<5.0
MW-8	07-Jul-09	**7.5**	4.5	<1.0	<2.0	0.21	<1.0	<5.0
MW-8	12-Oct-09	**15**	11	<1.0	<2.0	0.52	<1.0	<5.0
MW-8	12-Jan-10	<1.0	<1.0	<1.0	<2.0	0.088	<1.0	<5.0
MW-8	13-Oct-10	**12**	<1.0	1.7	16	0.25	<1.0	<5.0
MW-8	20-Jan-11	**35**	<1.0	6.5	6.3	0.16	<1.0	<5.0
MW-8	10-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	15-Aug-11	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0
MW-8	21-Nov-11	<2.0	<2.0	<2.0	<4.0	<0.10	2.2	<5.0
MW-8	21-Feb-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0
MW-8	24-May-12	<2.0	<2.0	<2.0	<4.0	<0.10	<1.0	<5.0
MW-8	21-Sep-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	04-Dec-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	26-Mar-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	26-Jun-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	07-Aug-17	Plugged and Abandoned						
MW-9	05-May-08	**6.2**	7.5	<1.0	2.3	0.90	<1.0	<5.0
MW-9	24-Sep-08	**17**	12	<1.0	<2.0	0.32	<1.0	<5.0
MW-9	05-Jan-09	NS - Well Dry						
MW-9	07-Apr-09	**12**	6.2	<1.0	<2.0	0.32	<1.0	<5.0
MW-9	07-Jul-09	**7.0**	5.3	<1.0	<2.0	0.28	<1.0	<5.0
MW-9	12-Oct-09	**26**	2.0	<1.0	<2.0	0.31	<1.0	<5.0

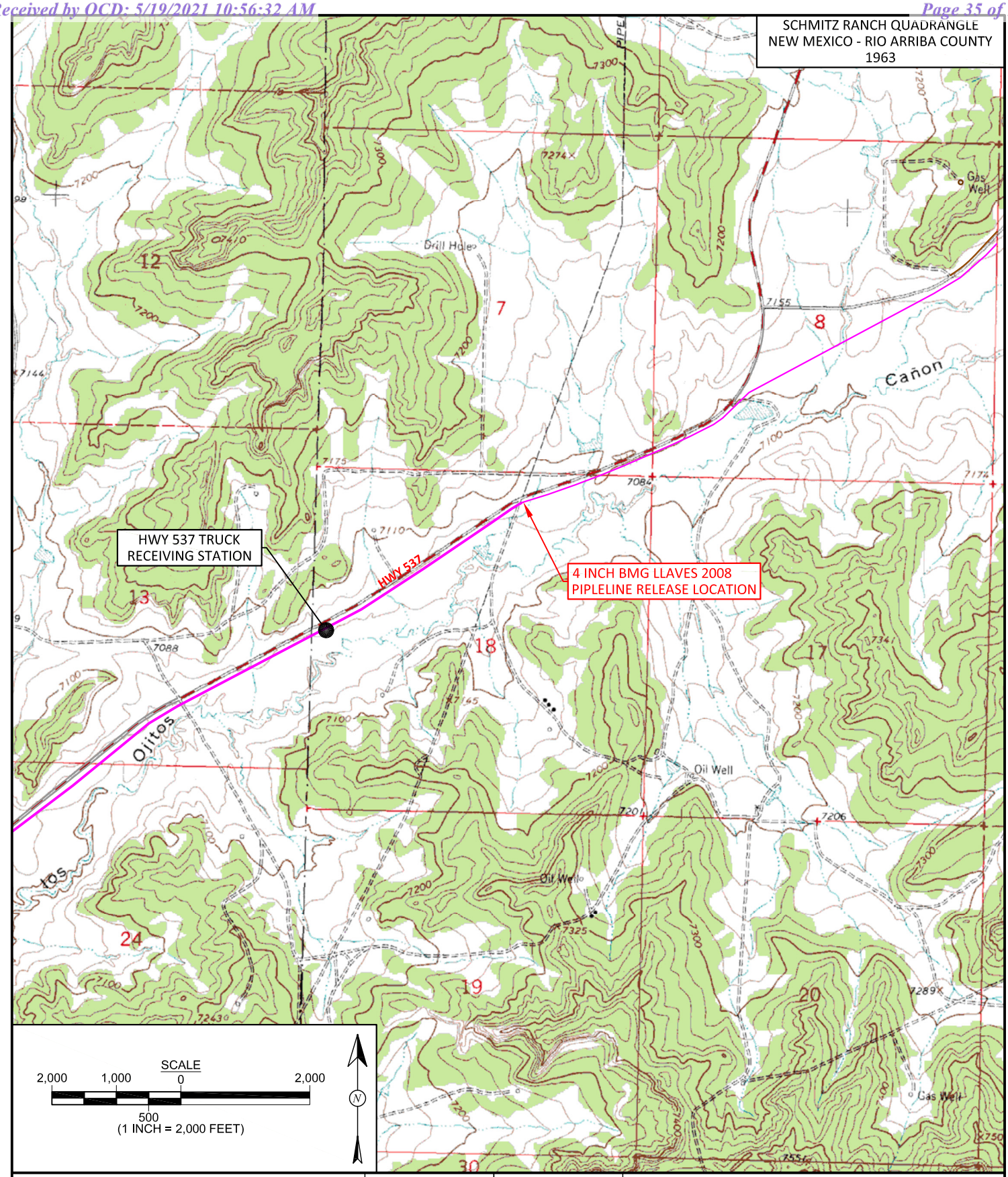
TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS -
VOLATILE ORGANICS AND PETROLEUM HYDROCARBONS
BMG HWY 537 LLAVES PIPELINE 2008 OIL 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		**8021/8260**	**8021/826**	**8021/8260**	**8021/8260**	**8015D**	**8015M/D**	**8015M/D**
New Mexico WQCC		***5***	***1000***	***700***	***620***	***NE***	***NE***	***NE***
MW-9	12-Jan-10	NAPL Present through Current Date						
MW-9R	25-Sep-19	<1.0	<1.0	56	80	0.87	<1.0	<5.0
MW-9R	25-Mar-20	<2.0	<2.0	50	44	0.66	1.2	<5.0
MW-9R	23-Jun-20	<1.0	<1.0	11	23	0.86	46	20
MW-9R	23-Sep-20	<5.0	<5.0	38	100	3.8	550	270
MW-9R	23-Nov-20	<5.0	<5.0	12	29	1.0	250	120

NOTE: NS = Not Sampled
NA = Not Analyzed
TPH = Total Petroleum Hydrocarbons
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
MRO = Motor Oil Range Organics

Figures



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CHECKED BY: E. McNally	**DATE CHECKED:** July 6, 2020
APPROVED BY: E. McNally	**DATE APPROVED:** July 6, 2020

FIGURE 1

TOPOGRAPHIC SITE LOCATION MAP

BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422

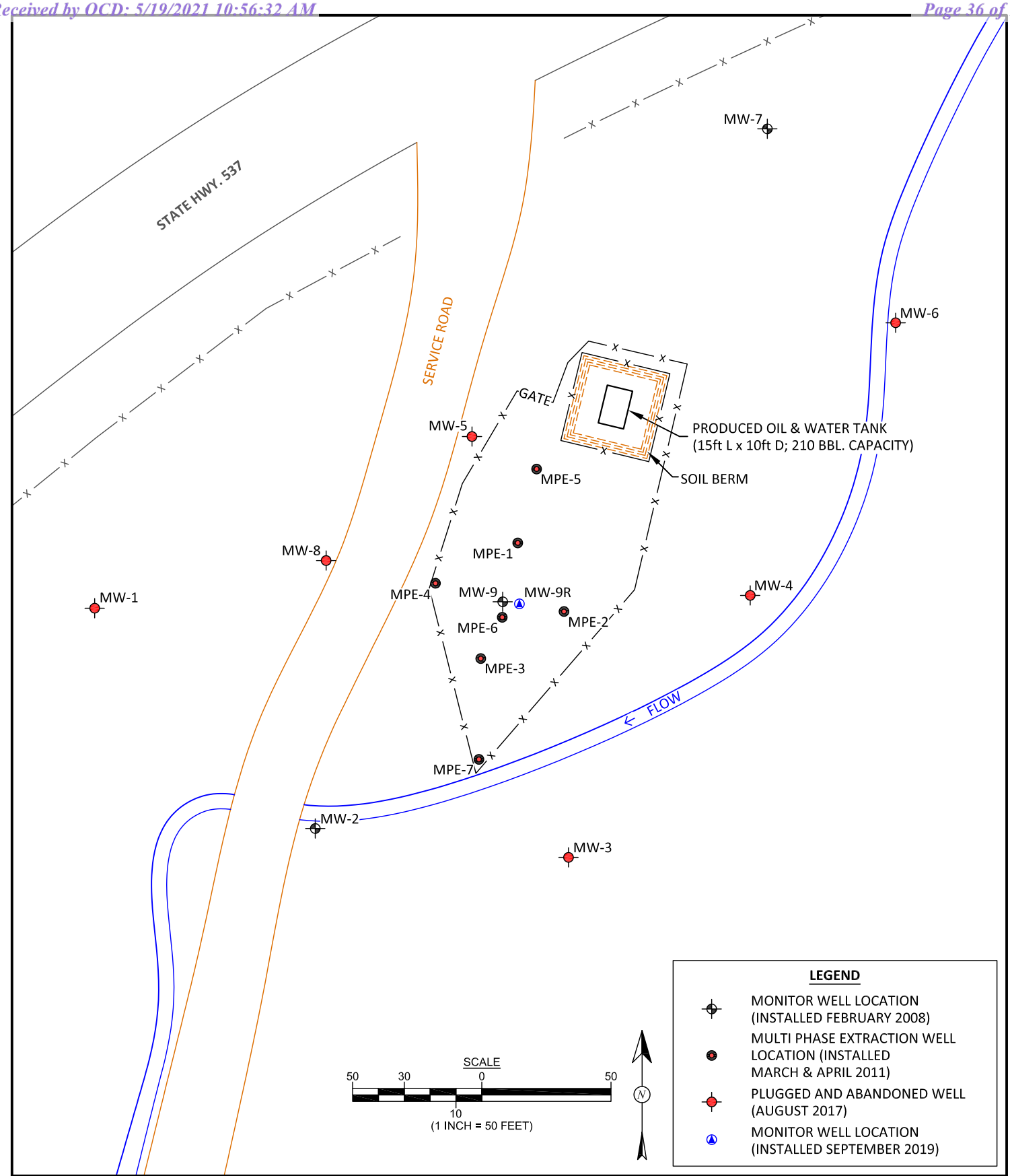

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FIGURE 2

GENERAL SITE MAP

BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422

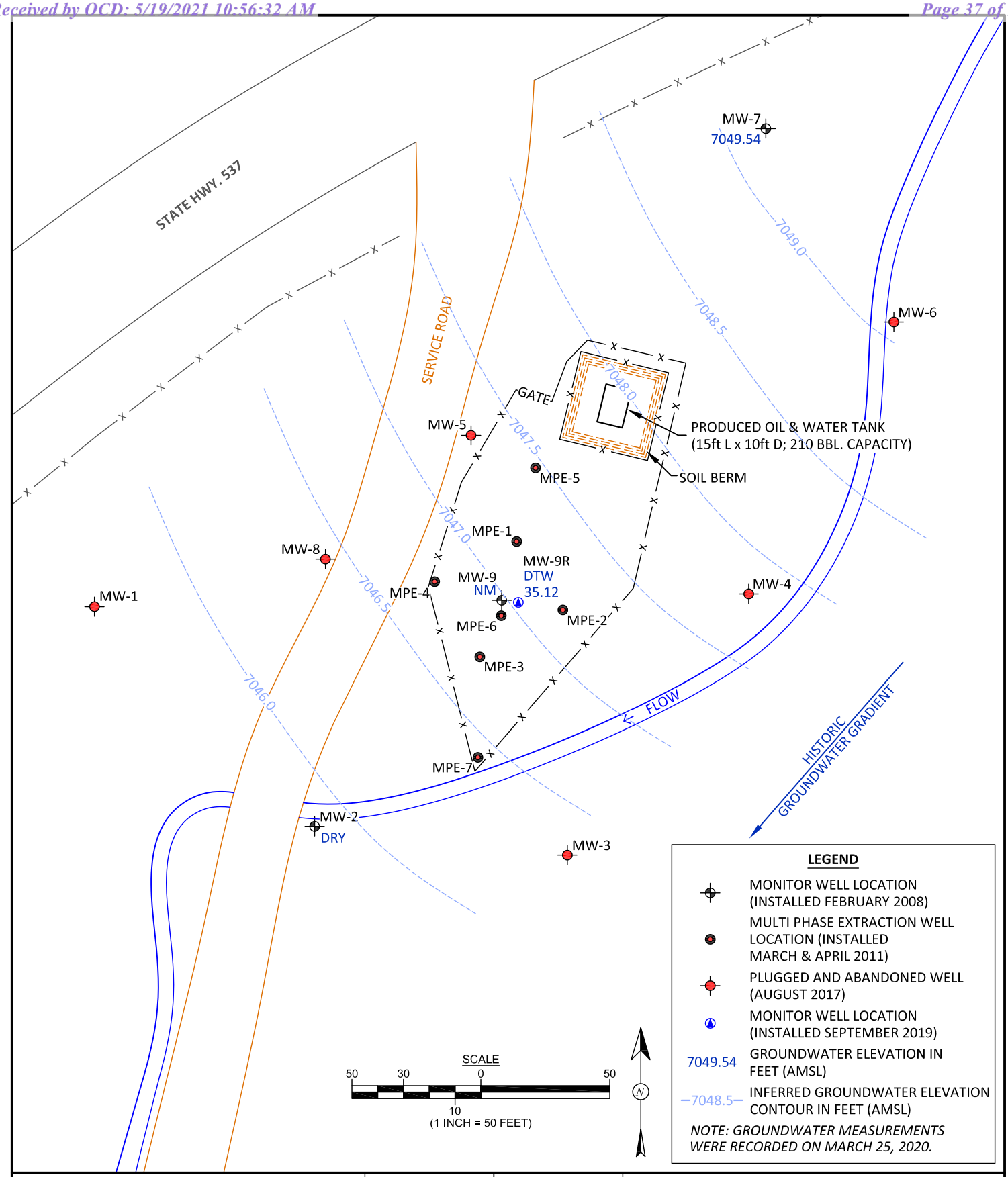

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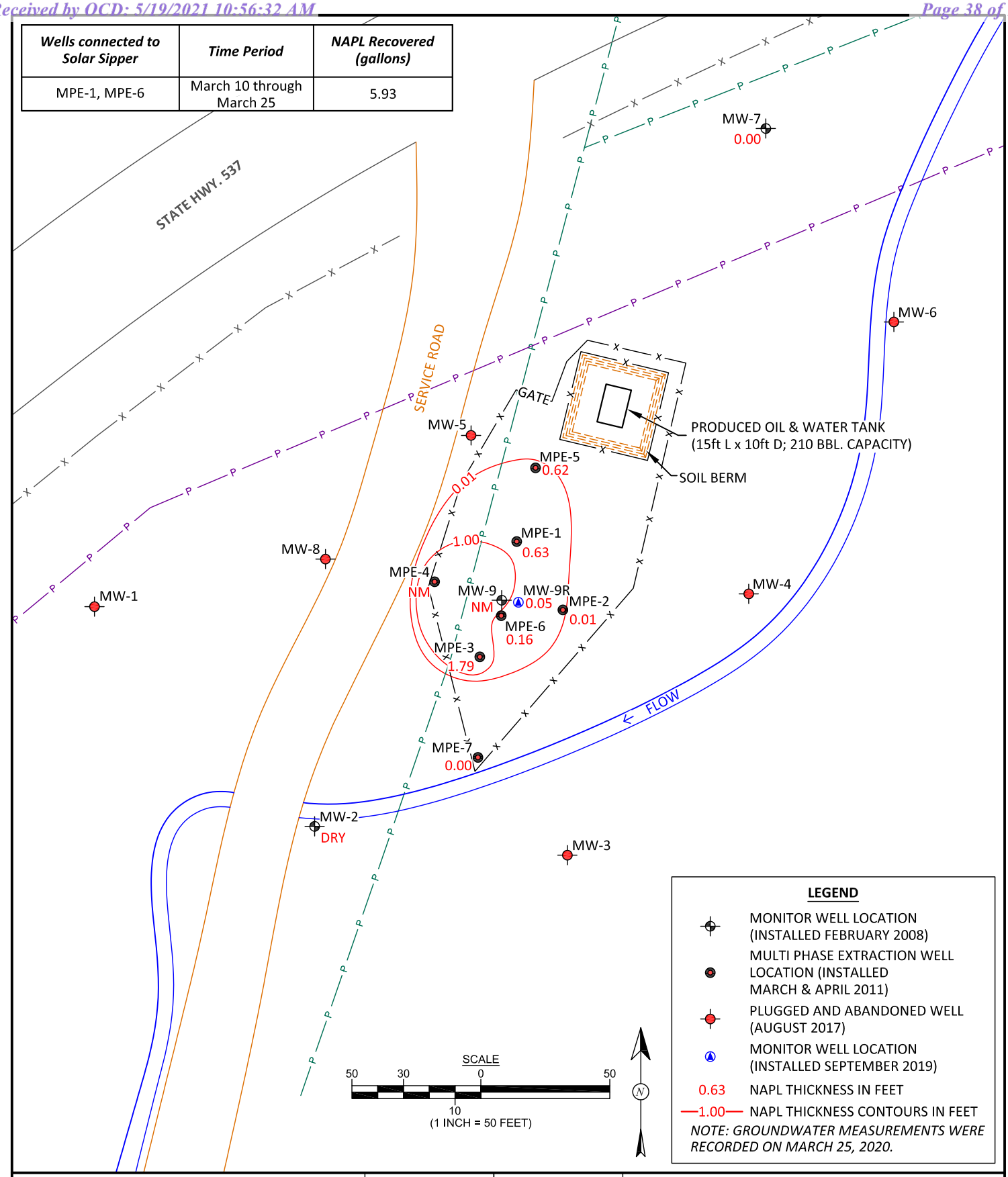
FIGURE 3

GROUNDWATER ELEVATION CONTOURS, MARCH 2020

BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422

Wells connected to Solar Sipper	Time Period	NAPL Recovered (gallons)
MPE-1, MPE-6	March 10 through March 25	5.93



LEGEND

- MONITOR WELL LOCATION (INSTALLED FEBRUARY 2008)
- MULTI PHASE EXTRACTION WELL LOCATION (INSTALLED MARCH & APRIL 2011)
- PLUGGED AND ABANDONED WELL (AUGUST 2017)
- MONITOR WELL LOCATION (INSTALLED SEPTEMBER 2019)
- 0.63 NAPL THICKNESS IN FEET
- —1.00— NAPL THICKNESS CONTOURS IN FEET

NOTE: GROUNDWATER MEASUREMENTS WERE RECORDED ON MARCH 25, 2020.

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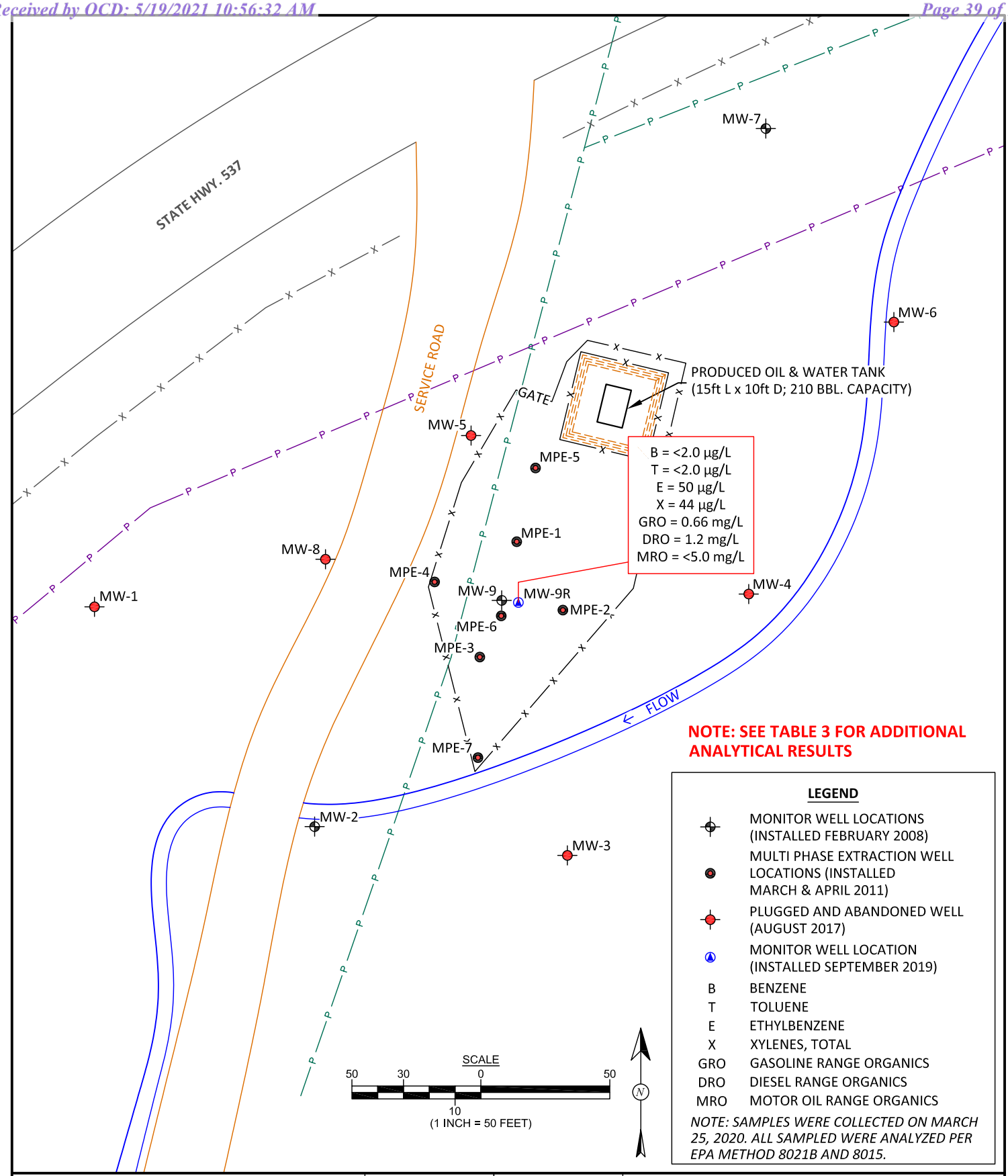
FIGURE 4

RESIDUAL NAPL THICKNESS CONTOURS MARCH 2020

BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422



NOTE: SEE TABLE 3 FOR ADDITIONAL ANALYTICAL RESULTS

LEGEND

- MONITOR WELL LOCATIONS (INSTALLED FEBRUARY 2008)
- MULTI PHASE EXTRACTION WELL LOCATIONS (INSTALLED MARCH & APRIL 2011)
- PLUGGED AND ABANDONED WELL (AUGUST 2017)
- MONITOR WELL LOCATION (INSTALLED SEPTEMBER 2019)

B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	XYLENES, TOTAL
GRO	GASOLINE RANGE ORGANICS
DRO	DIESEL RANGE ORGANICS
MRO	MOTOR OIL RANGE ORGANICS

NOTE: SAMPLES WERE COLLECTED ON MARCH 25, 2020. ALL SAMPLED WERE ANALYZED PER EPA METHOD 8021B AND 8015.

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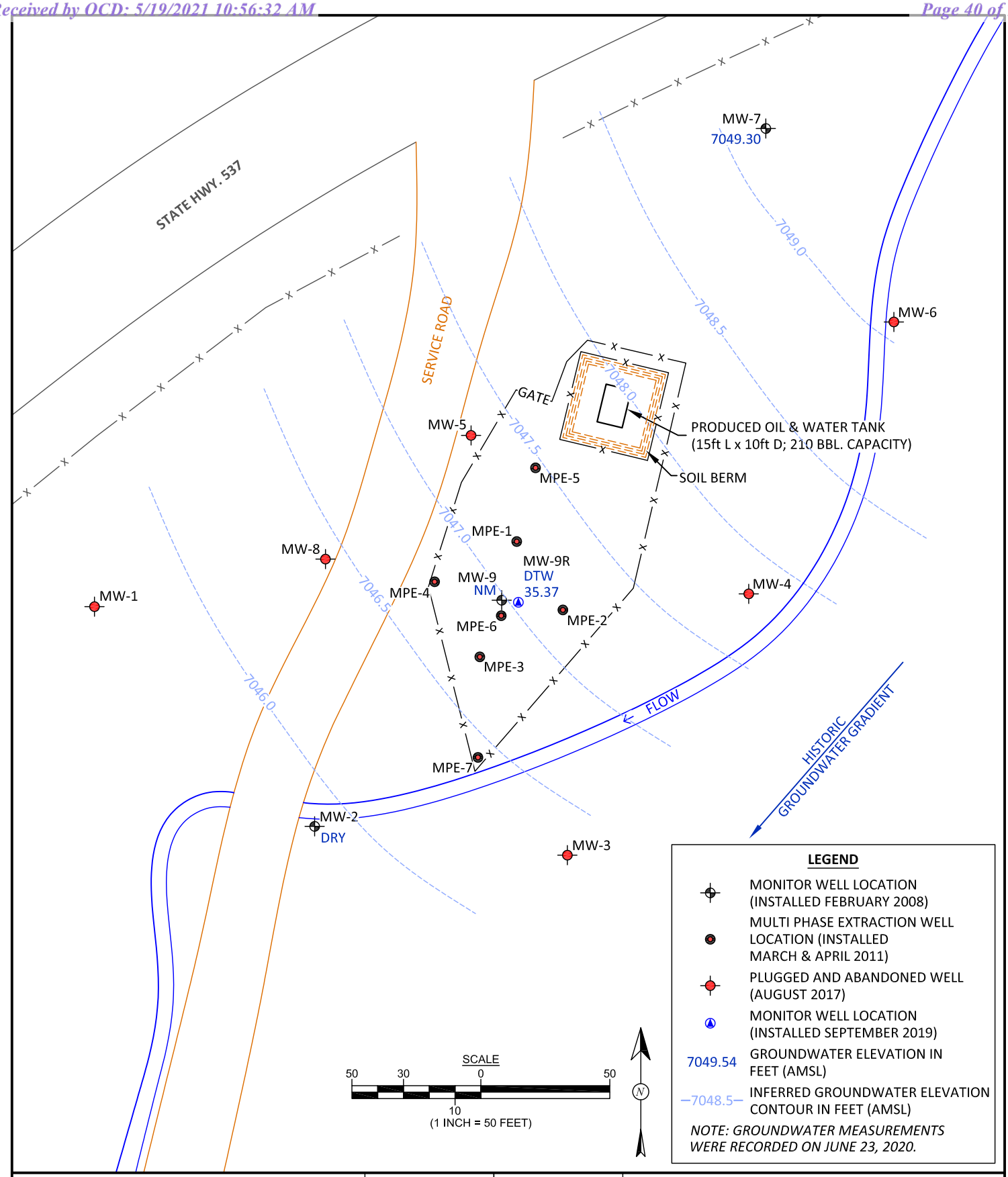
FIGURE 5

GROUNDWATER CONTAMINANT CONCENTRATIONS, MARCH 2020
BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422



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E. McNally	July 6, 2020

FIGURE 6

GROUNDWATER ELEVATION CONTOURS, JUNE 2020

BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422

Wells connected to Solar Sipper	Time Period	NAPL Recovered (gallons)
MPE-1, MPE-6	March 25 through June 23	1.69

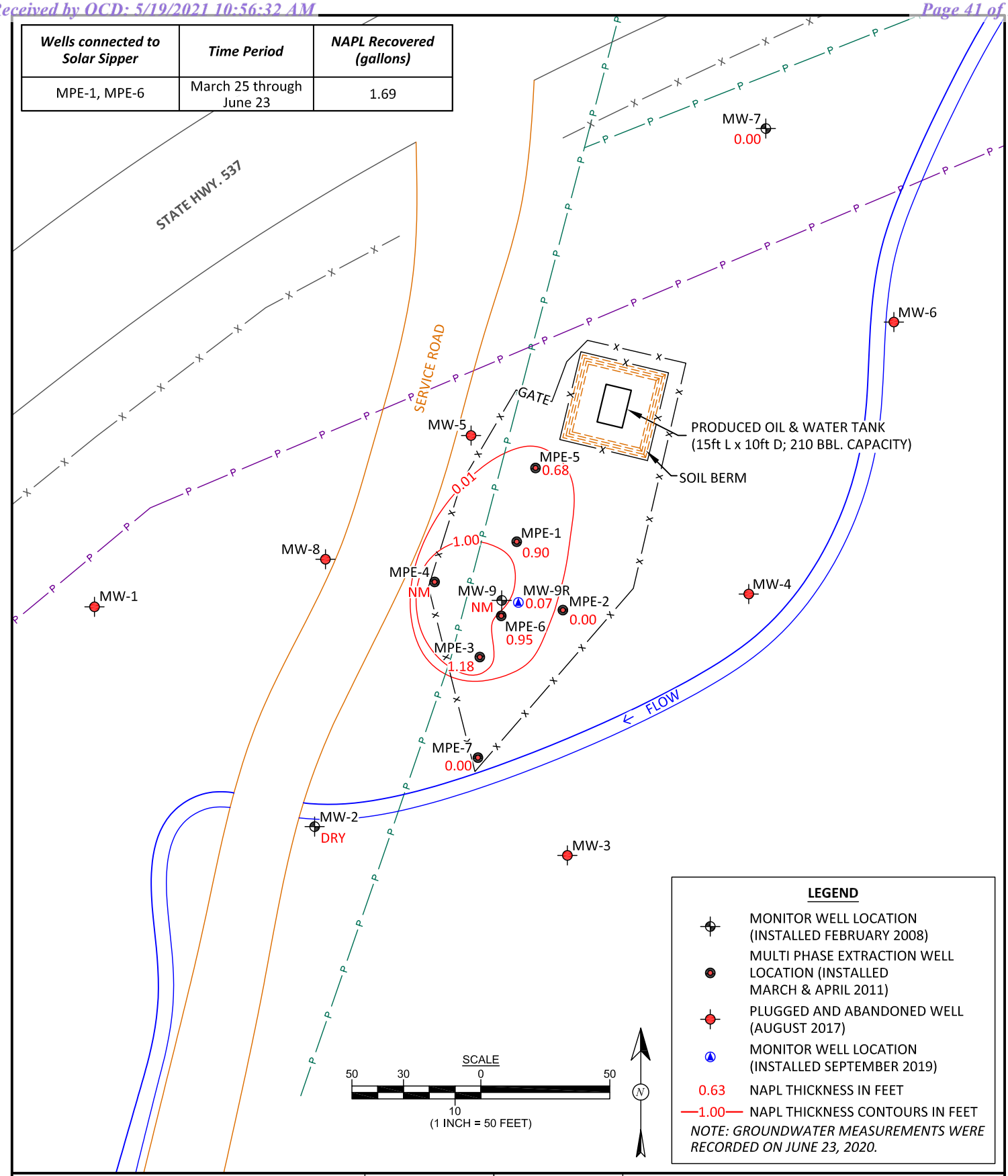

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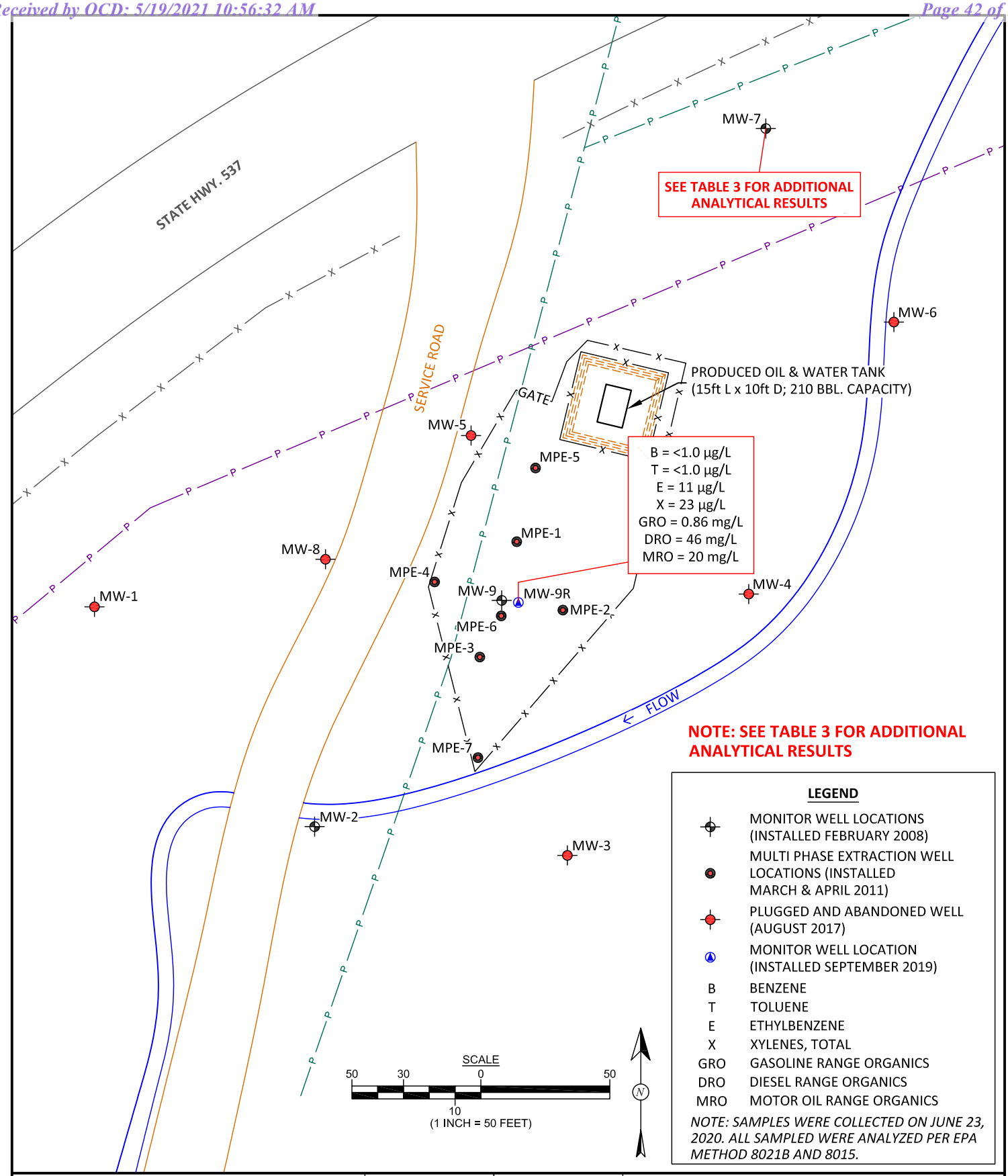
FIGURE 7

RESIDUAL NAPL THICKNESS CONTOURS
JUNE 2020
BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422



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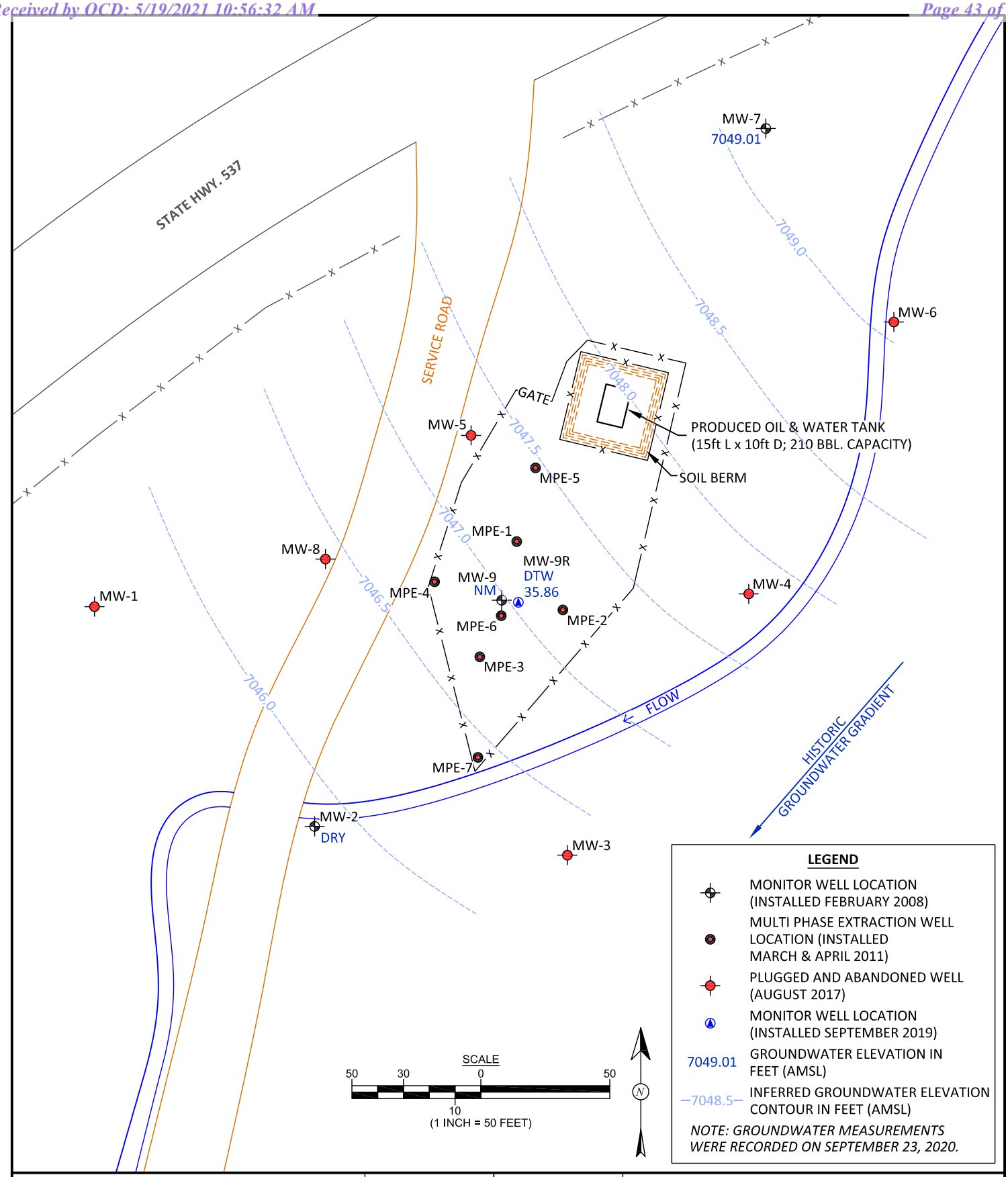
E. McNally	July 6, 2020

FIGURE 8

GROUNDWATER CONTAMINANT CONCENTRATIONS, JUNE 2020
BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422



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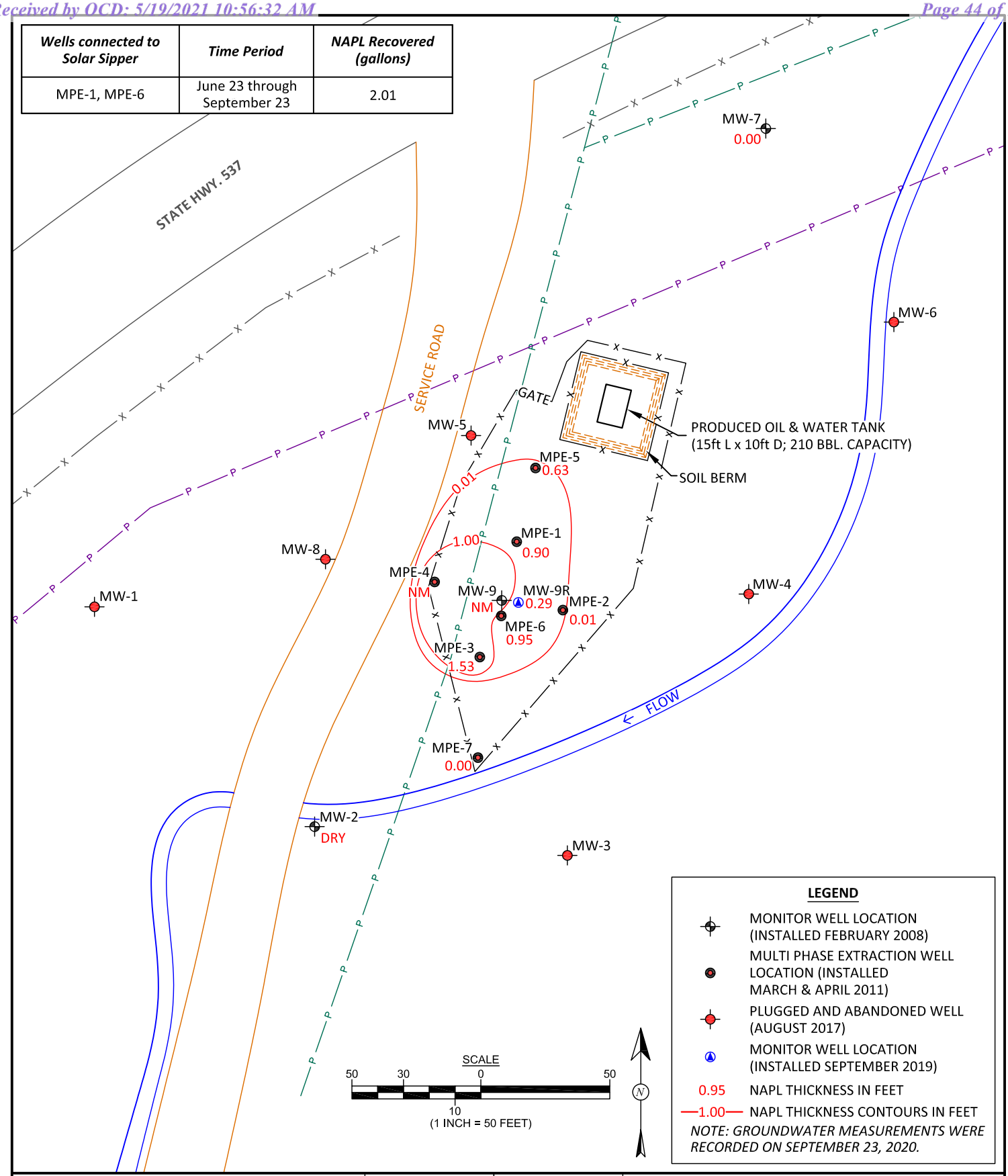
APPROVED BY: E. McNally	**DATE APPROVED:** December 17, 2020

FIGURE 9

GROUNDWATER ELEVATION CONTOURS, SEPTEMBER 2020
BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422

Wells connected to Solar Sipper	Time Period	NAPL Recovered (gallons)
MPE-1, MPE-6	June 23 through September 23	2.01



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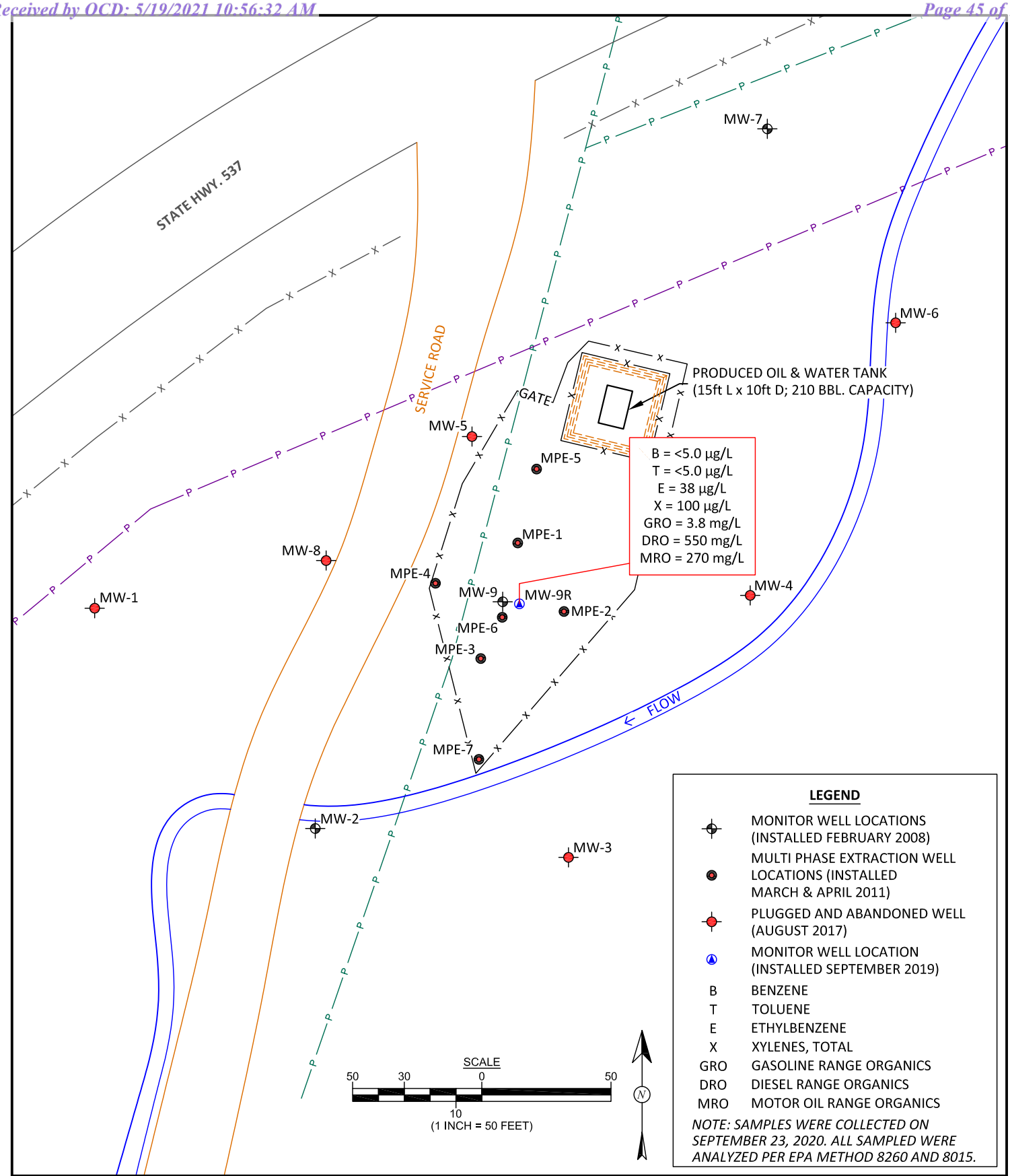
D. Reese	December 17, 2020
APPROVED BY:	**DATE APPROVED:**
E. McNally	December 17, 2020

FIGURE 10

RESIDUAL NAPL THICKNESS CONTOURS SEPTEMBER 2020
BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422



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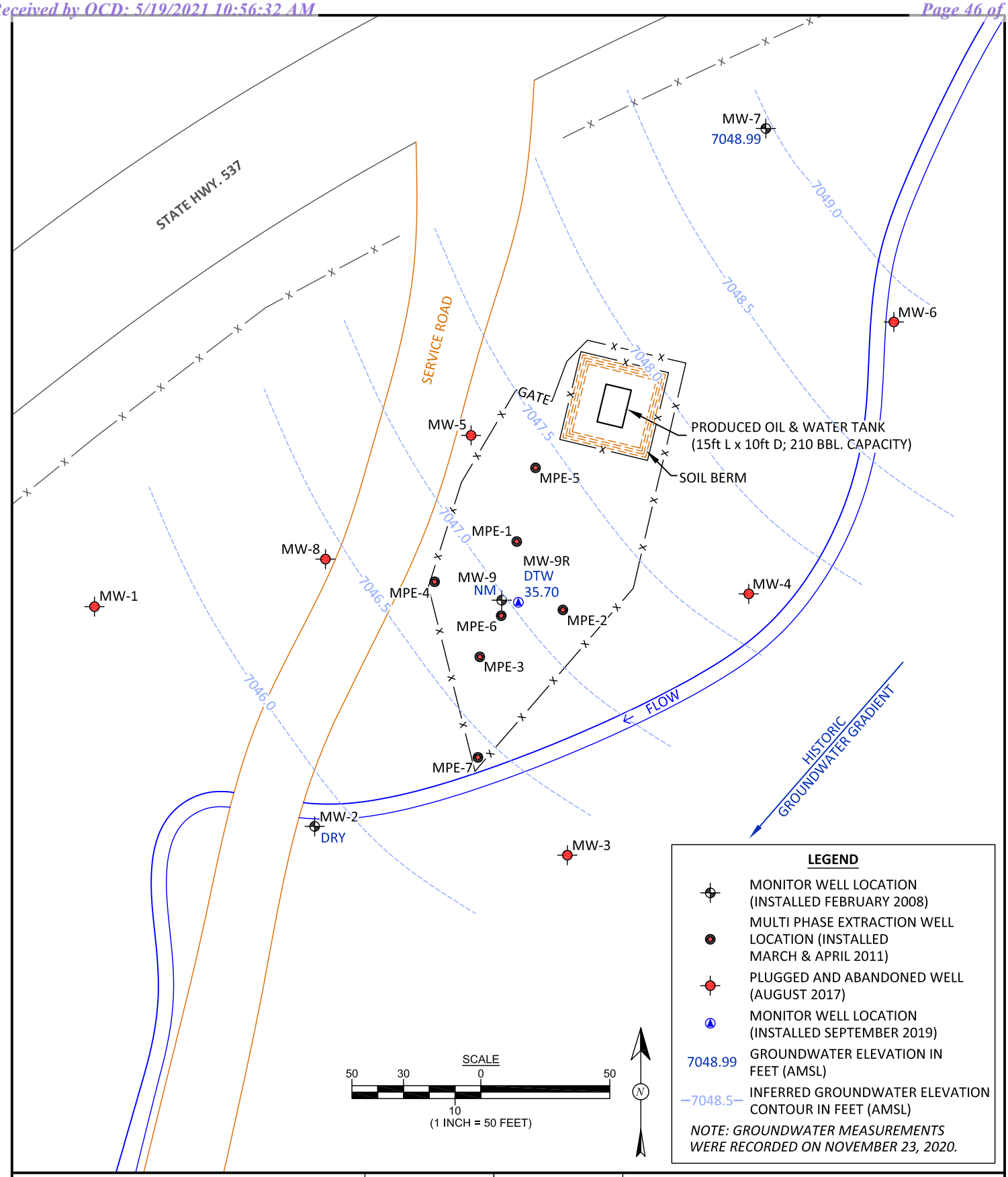
APPROVED BY: E. McNally	**DATE APPROVED:** December 17, 2020

FIGURE 11

GROUNDWATER CONTAMINANT CONCENTRATIONS, SEPTEMBER 2020

BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422



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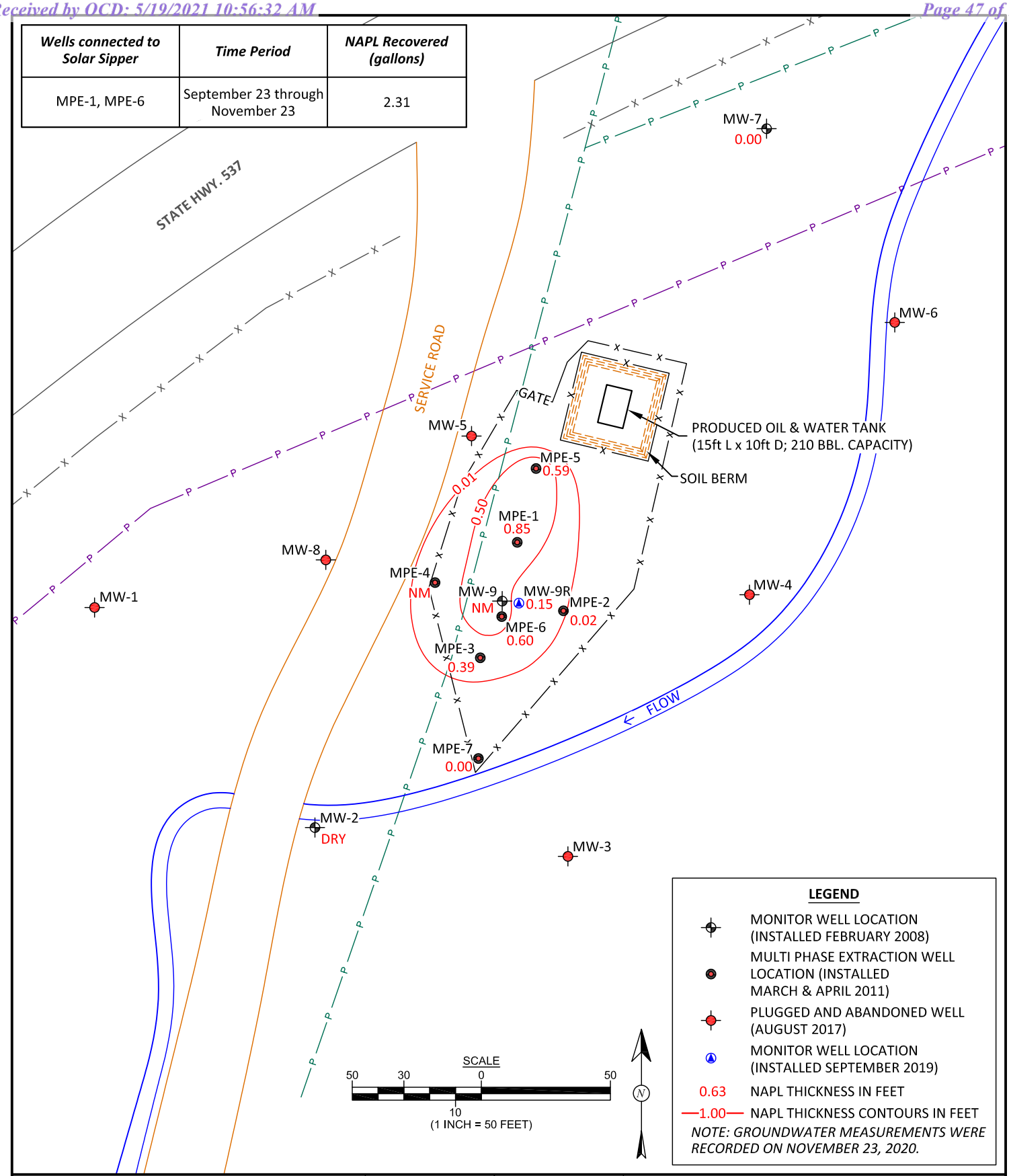
Farmington, NM • Durango, CO
animasenvironmental.com

DRAWN BY: C. Lameman	**DATE DRAWN:** March 3, 2017
REVISIONS BY: C. Lameman	**DATE REVISED:** December 17, 2020
CHECKED BY: D. Reese	**DATE CHECKED:** December 17, 2020
APPROVED BY: E. McNally	**DATE APPROVED:** December 17, 2020

FIGURE 12

GROUNDWATER ELEVATION CONTOURS, NOVEMBER 2020
BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422

Wells connected to Solar Sipper	Time Period	NAPL Recovered (gallons)
MPE-1, MPE-6	September 23 through November 23	2.31



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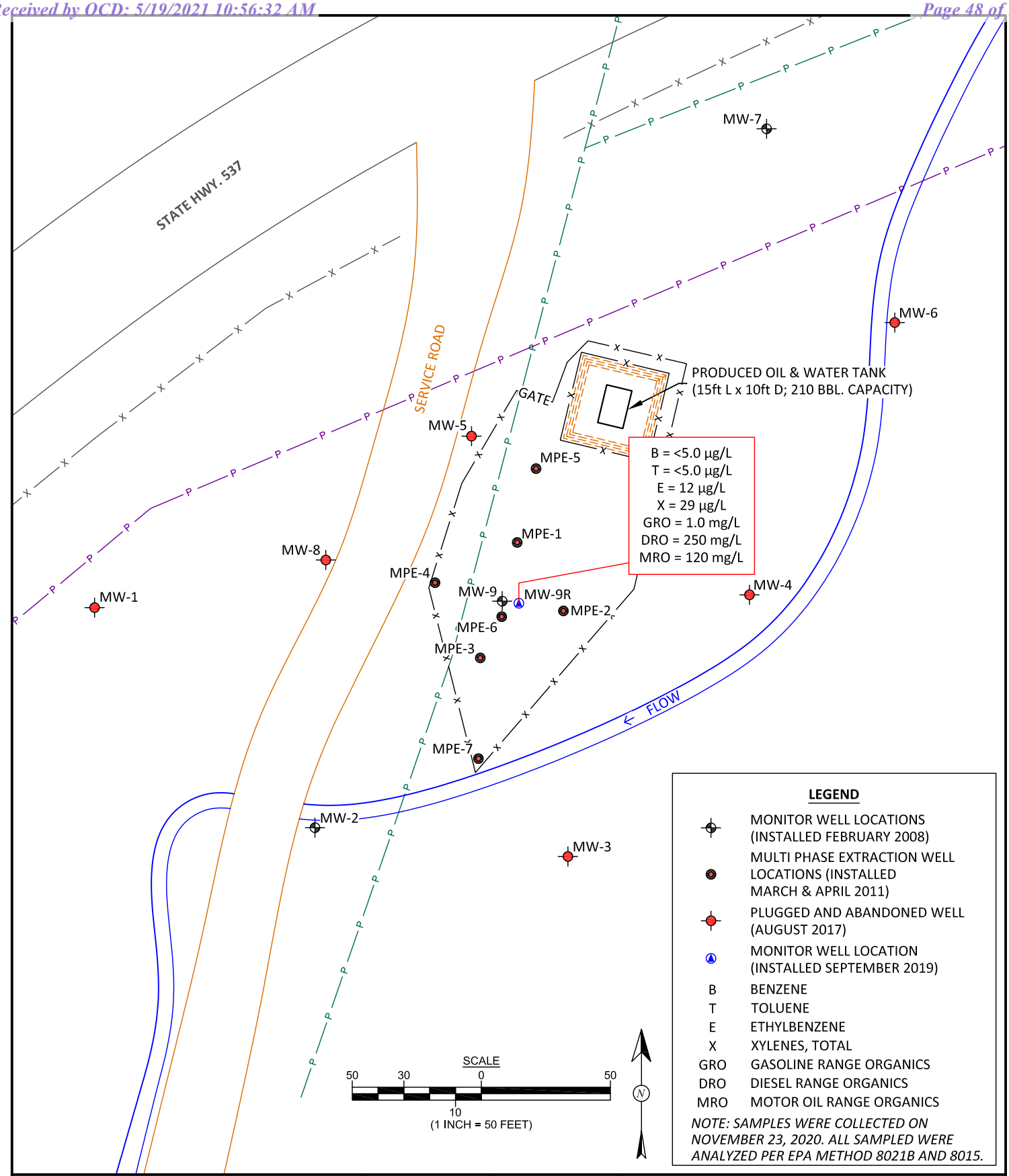
animasenvironmental.com

DRAWN BY:	DATE DRAWN:
C. Lameman	March 6, 2017
REVISIONS BY:	**DATE REVISED:**
C. Lameman	December 17, 2020
CHECKED BY:	**DATE CHECKED:**
D. Reese	December 17, 2020
APPROVED BY:	**DATE APPROVED:**
E. McNally	December 17, 2020

FIGURE 13

RESIDUAL NAPL THICKNESS CONTOURS NOVEMBER 2020
BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422



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

DRAWN BY:	DATE DRAWN:
C. Lameman	November 21, 2019
REVISIONS BY:	**DATE REVISED:**
C. Lameman	December 17, 2020
CHECKED BY:	**DATE CHECKED:**
D. Reese	December 17, 2020
APPROVED BY:	**DATE APPROVED:**
E. McNally	December 17, 2020

FIGURE 14

GROUNDWATER CONTAMINANT CONCENTRATIONS, NOVEMBER 2020

BMG HIGHWAY 537
LLAVES 2008 PIPELINE OIL RELEASE
NW¼ NE¼, SECTION 18, T25N, R3W
RIO ARRIBA COUNTY, NEW MEXICO
N36.40357, W107.18422

Appendices

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 2008 Release
Tech: CL/GB

Project No.:
Date: 3-25-20
Time: 11:15 -
Form: 1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-2	12:45	~~~		~~~	DRY
MW-7	12:40	-	40.61	-	1" Well
MW-9R	11:48	35.07	~~35.07~~ 35.12	0.05	2" Well
MPE-1	11:41	37.08	37.71	0.63	2" Well
MPE-2	11:26	34.62	34.63	0.01	2" Well
MPE-3	11:28	34.45	36.24	1.79	2" Well
MPE-4	11:31	~~~		~~~	2" Well @ 35.32 ~~Blockage~~ PVC Well appears to shifted. Not aligned at lower section
MPE-5	11:37	37.21	37.83	0.62	2" Well
MPE-6	11:40	35.01	35.17	0.16	2" Well
MPE-7	11:52 11:44	-	32.85	-	2" Well
NAPL Recovery DRUM	11:44	2.23	2.51	0.28	Bottom of Drum = 2.75 Dia. = 1.9'

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

WATER SAMPLE COLLECTION FORM

Monitor Well No: MW-7

Animas Environmental Services
624 E Comanche St., Farmington NM
Tel. (505) 564-2281 animasenvironmental.com

Site: Highway 537 2008 Spill
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 0.75
Initial D.T.W. (ft): 40.61 **Time:** 12:40 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.61 **Time:** 12:42 *(taken prior to purging well)*
Final D.T.W. (ft): 42.85 **Time:** 13:45 *(taken after sample collection)*
If NAPL Present: D.T.P.: — **D.T.W.:** — **Thickness:** — **Time:** —

Project No.: AES 080101
Date: 3-25-20
Arrival Time: 12:39
Air Temp: 50°F Cloudy/Breezy
T.O.C. Elev. (ft): 7090.15
Total Well Depth (ft): 43.54

Water Quality Parameters - Recorded During Well Purging

YSI # 2 Calibration Date: 3-25-20 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
12:49	12.5	2.00	1.78	7.13	168.9	Initial	Clear Brown Algae/No Odor
—	Insufficient Water for YSI Readings					—	Slow Recharge
	Insufficient Recharge for Samples - NO SAMPLES @ 13:45						

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

TDS per USEPA Method (SM-2540-C) - 1-500mL plastic (Cool)
~~See Abatement plan or Chain of Custody for Analytical Analysis and Containers~~ or
Dissolved Mn and Fe per USEPA Method (6020) - 1-125mL plastic (HNO_3 - filtered field)

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

Notes/Comments: Calculated Purge Volume ≈ 0.35 Gallons

13:04

WATER SAMPLE COLLECTION FORM

Monitor Well No: MW-9R

Animas Environmental Services
624 E Comanche St., Farmington NM
Tel. (505) 564-2281 animasenvironmental.com

Site: Highway 537 2008 Spill
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): — **Time:** —
Confirm D.T.W. (ft): — **Time:** —
Final D.T.W. (ft): — **Time:** —
If NAPL Present: D.T.P.: 35.07 **D.T.W.:** 35.12 **Thickness:** 0.05" **Time:** 11:48 SEE NOTES BELOW

Project No.: AES 080101
Date: 3-25-20
Arrival Time:
Air Temp: 48°F Cloudy
T.O.C. Elev. (ft): TBS
Total Well Depth (ft): approx. 38
(taken at initial gauging of all wells)
(taken prior to purging well)
(taken after sample collection)

Water Quality Parameters - Recorded During Well Purging

YSI # — Calibration Date: N/A

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	NO WATER QUALITY READINGS						
	DUE TO CRUDE OIL PRESENCE						
12:35	—					—	Sample Collected
							Below "Sheen"

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

BTEX (8021) per ESEPA Method (8021) and TPH(GRO,DRO,MRO) (8015) 5-40mL VOA (HgCl2) 1-250mL ~~plastic~~ Amber Glass (cool)
~~See Abatement plan or Chain of Custody for Analytical Analysis and Containers~~ OL
Dissolved Mn and Fe per USEPA Method (6020) - 1-125mL plastic ((HNO3) field filtered))

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 Volume ≈ N/A. Bailed off NAPL.
Final D.T.P = — D.T.W. = 35.20 Thickness = 0.00 "Sheen" Time = 12:36
Initial Bailer had no NAPL on water surface BUT was on sides of Bailer. Attempt to Bail off "Sheen".

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	**Project No.:**	
Site:	BMG	**Date:**	6-23-20
Location:	Hwy 537 2008 Release	**Time:**	10:32 – 12:40
Tech:	Greg Broome / Corwin Lameman	**Form:**	1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-2	11:52	—	DRY	—	
MW-7	10:36	—	40.85	—	
MW-9R	11:04	35.30	35.37	—	
* MPE-1	11:40	37.60	38.50	0.90	2" Well Stinger in same well Lowered to NAPL depth.
MPE-2	11:35	~~34.85~~	34.85	< 0.01	2" Well ~~Stinger in same well. Lowered to NAPL depth.~~
MPE-3	11:39	34.87	36.05	1.18	2" Well Stinger in same well. Lowered to NAPL depth.
MPE-4	11:32 ~~11:37~~	~~35.12~~	~~36.07~~		2" Well PVC well casing warp or shifted. Can't send probe down
MPE-5	11:30	37.42	38.10	0.68	2" Well
MPE-6	11:37	35.12	36.07	0.95	2" Well
MPE-7	11:34	—	33.12	—	2" Well
Waste-NAPL Drum	11:44	1.97	2.05	0.08	Bottom of drum=2.75 Dia=1.9'
					*Valve replaced on stinger.

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

WATER SAMPLE COLLECTION FORM

Monitor Well No: MW-2

Animas Environmental Services
624 E Comanche St., Farmington NM
Tel. (505) 564-2281 animasenvironmental.com

Site: Highway 537 2008 Spill
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CJ/GB
Purge / No Purge: Purge
Well Diameter (in): 0.75
Initial D.T.W. (ft): Dry **Time:** 11:52 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): — **Time:** — *(taken prior to purging well)*
Final D.T.W. (ft): — **Time:** — *(taken after sample collection)*
If NAPL Present: **D.T.P.:** — **D.T.W.:** — **Thickness:** — **Time:** —

Project No.: AES 080101
Date: 6-23-20
Arrival Time: 11:50
Air Temp:
T.O.C. Elev. (ft): 7079.94
Total Well Depth (ft): 30.98

Water Quality Parameters - Recorded During Well Purging

YSI # — **Calibration Date:** NA

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

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

See Abatement plan or Chain of Custody for Analytical Analysis and Containers

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

Notes/Comments: Well dry. No Samples Collected

WATER SAMPLE COLLECTION FORM

Monitor Well No: MW-7

Animas Environmental Services
624 E Comanche St., Farmington NM
Tel. (505) 564-2281 animasenvironmental.com

Site: Highway 537 2008 Spill
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL / GB
Purge / No Purge: Purge
Well Diameter (in): 0.75
Initial D.T.W. (ft): 40.85 **Time:** 10:34 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 40.85 **Time:** 10:36 *(taken prior to purging well)*
Final D.T.W. (ft): 43.12 **Time:** 10:48 *(taken after sample collection)*
If NAPL Present: D.T.P.:_____ D.T.W.:_____ Thickness:_____ Time:_____

Project No.: AES 080101
Date: ~~4-7~~ 6-23-20
Arrival Time: 10:34
Air Temp:
T.O.C. Elev. (ft): 7090.15
Total Well Depth (ft): 43.54

Water Quality Parameters - Recorded During Well Purging

YSI # 1 Calibration Date: 2-22-20 GB

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
10:40	19.4	1.96	4.38	7.53	167.6	Initial	clear / No Odor
10:45							Samples collected

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

See Abatement plan or Chain of Custody for Analytical Analysis and Containers

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

Notes/Comments: Calculated Purge Volume ≈ 0.32 Gallons
only enough water to collect 125 ml filtered HNO_3

WATER SAMPLE COLLECTION FORM

Monitor Well No: MW-9R

Animas Environmental Services
624 E Comanche St., Farmington NM
Tel. (505) 564-2281 animasenvironmental.com

Site: Highway 537 2008 Spill
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/GB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): — **Time:** —
Confirm D.T.W. (ft): — **Time:** -
Final D.T.W. (ft): — **Time:** -

Project No.: AES 080101
Date: 6-23-20
Arrival Time: 11:03
Air Temp:
T.O.C. Elev. (ft): TBS
Total Well Depth (ft): approx. 38

(taken at initial gauging of all wells)
(taken prior to purging well)
(taken after sample collection)

If NAPL Present: **D.T.P.:** 35.30 **D.T.W.:** ~~35.37~~ 35.37 **Thickness:** 0.07 **Time:** 11:04

Water Quality Parameters - Recorded During Well Purging

YSI # — Calibration Date: —

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	NO WATER QUALITY READINGS						
	DUE TO CRUDE OIL PRESENCE						
11:22	—	—	—	—	—	—	Samples Collected
							Below Sheen

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

See Abatement plan or Chain of Custody for Analytical Analysis and Containers

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

Notes/Comments: Calculated Purge Volume N/A. Attempt to bail off NAPL. Bailed to a sheen.
Final D.T.P = "Sheen" D.T.W = 35.77 Thickness = <0.01 "sheen" Time = 11:25

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 2008 Release
Tech: C. Broome

Project No.:
Date: 9.23.20
Time: 10:52
Form: 1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-2	1058	—	DRY	—	
MW-7	1103	—	41.14	—	
MW-9R	1108	35.57	35.86	.29	
MPE-1	1114	37.79	38.69	.90	2" Well Hoser lowed to NAPL Depth
MPE-2	1117	35.14	35.15	.01	2" Well
MPE-3	1120	35.13	36.66	1.53	2" Well Hoser lowered to NAPL Depth
MPE-4	1122	Unable	to Read		2" Well Damaged.
MPE-5	1125	37.72	38.35	.63	2" Well
MPE-6	1128	35.39	36.34	.95	2" Well
MPE-7	1132	~~35~~ 0	33.43	- 0 -	2" Well
Waste NAPL Drum	1135	1.56	1.66	.10	Bottom of Drum = 1.22 Diameter = 1.9 ft

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

WATER SAMPLE COLLECTION FORM

Monitor Well No: MW-9R

Animas Environmental Services
624 E Comanche St., Farmington NM
Tel. (505) 564-2281 animasenvironmental.com

Site: Highway 537 2008 Spill
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician:
Purge / No Purge:
Well Diameter (in): 2

Project No.: AES 080101
Date: 9.23.20
Arrival Time: 1056
Air Temp: 79 F
T.O.C. Elev. (ft): TBS
Total Well Depth (ft): approx. 38

Initial D.T.W. (ft): 35.86 **Time:** 1108 *(taken at initial gauging of all wells)*
Confirm D.T.W. (ft): 35.86 **Time:** 1110 *(taken prior to purging well)*
Final D.T.W. (ft): 36.89 **Time:** 11:59 *(taken after sample collection)*
If NAPL Present: **D.T.P.:** 35.57 **D.T.W.:** 35.86 **Thickness:** .29 **Time:** 1110

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
		.29 NAPL		Present			
		No YSI Readings Taken					
		3.5 gal purged					
11:55		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 - 40 mL VOAs w/ HgCl2 and 1 - 125 mL Amber glass w/ non-preserve)

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

Notes/Comments:

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 2008 Release
Tech: GB/CL

Project No.:
Date: 11-23-20
Time:
Form: 1 of 1

Well ID	Time	Depth to NAPL (ft)	Depth to Water (ft)	NAPL Thickness (ft)	Notes / Observations
MW-2	11:31	—	DRY	—	
MW-7	11:29	—	41.16	—	
MW-9R	11:41	35.55	35.70	0.15	
MPE-1	11:16	37.84	38.69	0.85	2" Well Stinger was set @ 37'
MPE-2	11:11	35.11	35.13	0.02	2" Well
MPE-3	11:20	35.09	35.58	0.39	2" Well Stinger was set @ 37'
MPE-4	11:23				2" Well @35.28 Probe obstructed.
MPE-5	11:14	37.70	38.29	0.59	2" Well
MPE-6	11:18	35.37	36.27	0.60	2" Well
MPE-7	11:08	—	33.34	—	2" Well
Waste NAPL Drum	11:24	1.41	1.52	0.11	Bottom of Drum = 2.75 Diameter = 1.9 ft
					NAPL Sample Collection from MPE-1 @12:06. Lab name = Crude Oil

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

WATER SAMPLE COLLECTION FORM

Monitor Well No: MW-9R

Animas Environmental Services
624 E Comanche St., Farmington NM
Tel. (505) 564-2281 animasenvironmental.com

Site: Highway 537 2008 Spill
Location: Rio Arriba County, New Mexico
Project: Groundwater Monitoring and Sampling
Sampling Technician: CL/CB
Purge / No Purge: Purge
Well Diameter (in): 2
Initial D.T.W. (ft): — **Time:** —
Confirm D.T.W. (ft): — **Time:** —
Final D.T.W. (ft): — **Time:** —
If NAPL Present: **D.T.P.:** 35.55 **D.T.W.:** 35.70 **Thickness:** 0.15 **Time:** 11:41

Project No.: AES 080101
Date: 11-23-20
Arrival Time: 50F Cloudy Wind 5
Air Temp: 11:36
T.O.C. Elev. (ft): TBS
Total Well Depth (ft): approx. 38
(taken at initial gauging of all wells)
(taken prior to purging well)
(taken after sample collection)

Water Quality Parameters - Recorded During Well Purging

YSI # — **Calibration Date:** NA

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (see reverse for calc.)	Notes/Observations
	NO WATER QUALITY READINGS						
	NAPL PRESENT						
11:56	—	—	—	—	—	—	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 - 40 mL VOAs w/ HgCl2 and 1 - 125 mL Amber glass w/ non-preserve)

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: Attempt Bail for NAPL. Samples Collected Below NAPL Layer.
Final Reading - 35.89 DTW No NAPL Reading

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 07, 2020

Elizabeth McNally

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX

RE: BMG Hwy 537 2008 OrderNo.: 2003C85

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/27/2020 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 **2003C85**
Date Reported: **4/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9R
Project: BMG Hwy 537 2008
Collection Date: 3/25/2020 12:35:00 PM
Lab ID: 2003C85-001 **Matrix:** AQUEOUS **Received Date:** 3/27/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: DISSOLVED METALS						Analyst:	**ELS**
Iron	1.9	0.10		mg/L	5	3/31/2020 9:38:04 AM	A67723
Manganese	2.5	0.010		mg/L	5	3/31/2020 9:38:04 AM	A67723
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**DJF**
Gasoline Range Organics (GRO)	0.66	0.10	D	mg/L	2	4/4/2020 9:41:18 PM	C67855
Surr: BFB	102	70-130	D	%Rec	2	4/4/2020 9:41:18 PM	C67855
EPA METHOD 8015M/D: DIESEL RANGE						Analyst:	**JME**
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	4/1/2020 6:40:59 PM	51445
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/1/2020 6:40:59 PM	51445
Surr: DNOP	113	70-130		%Rec	1	4/1/2020 6:40:59 PM	51445
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst:	**DJF**
Benzene	ND	2.0	D	µg/L	2	4/4/2020 9:41:18 PM	A67855
Toluene	ND	2.0	D	µg/L	2	4/4/2020 9:41:18 PM	A67855
Ethylbenzene	50	2.0	D	µg/L	2	4/4/2020 9:41:18 PM	A67855
Xylenes, Total	44	3.0	D	µg/L	2	4/4/2020 9:41:18 PM	A67855
Surr: 1,2-Dichloroethane-d4	98.7	70-130	D	%Rec	2	4/4/2020 9:41:18 PM	A67855
Surr: 4-Bromofluorobenzene	94.9	70-130	D	%Rec	2	4/4/2020 9:41:18 PM	A67855
Surr: Dibromofluoromethane	99.7	70-130	D	%Rec	2	4/4/2020 9:41:18 PM	A67855
Surr: Toluene-d8	99.7	70-130	D	%Rec	2	4/4/2020 9:41:18 PM	A67855

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

Qualifiers:

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

Analytical Report
Lab Order **2003C85**
Date Reported: **4/7/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2008 **Collection Date:**
Lab ID: 2003C85-002 **Matrix:** TRIP BLANK **Received Date:** 3/27/2020 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/4/2020 10:09:52 PM	C67855
Surr: BFB	98.7	70-130		%Rec	1	4/4/2020 10:09:52 PM	C67855
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	4/4/2020 10:09:52 PM	A67855
Toluene	ND	1.0		µg/L	1	4/4/2020 10:09:52 PM	A67855
Ethylbenzene	ND	1.0		µg/L	1	4/4/2020 10:09:52 PM	A67855
Xylenes, Total	ND	1.5		µg/L	1	4/4/2020 10:09:52 PM	A67855
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	4/4/2020 10:09:52 PM	A67855
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	4/4/2020 10:09:52 PM	A67855
Surr: Dibromofluoromethane	107	70-130		%Rec	1	4/4/2020 10:09:52 PM	A67855
Surr: Toluene-d8	97.0	70-130		%Rec	1	4/4/2020 10:09:52 PM	A67855

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

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C85**
07-Apr-20

Client: Animas Environmental Services
Project: BMG Hwy 537 2008

Sample ID: **MB-51445**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **51445**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340231** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.96		1.000		96.5	70	130			

Sample ID: **MB-51446**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **51446**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340232** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	1.1		1.000		110	70	130			

Sample ID: **LCS-51445**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **51445**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340233** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.1	1.0	5.000	0	103	70	130			
Surr: DNOP	0.50		0.5000		99.2	70	130			

Sample ID: **LCS-51446**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **51446**	RunNo: **67765**
Prep Date: **3/31/2020**	Analysis Date: **4/1/2020**	SeqNo: **2340234** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	0.55		0.5000		110	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C85**
07-Apr-20

Client: Animas Environmental Services
Project: BMG Hwy 537 2008

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **A67855** RunNo: **67855**
Prep Date: Analysis Date: **4/4/2020** SeqNo: **2343945** 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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.1	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID: **100ng btex lcs** SampType: **LCS4** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **BatchQC** Batch ID: **A67855** RunNo: **67855**
Prep Date: Analysis Date: **4/4/2020** SeqNo: **2343946** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.5	80	120			
Toluene	21	1.0	20.00	0	105	80	120			
Ethylbenzene	21	1.0	20.00	0	105	80	120			
Xylenes, Total	65	1.5	60.00	0	109	80	120			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C85**
07-Apr-20

Client: Animas Environmental Services
Project: BMG Hwy 537 2008

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A67723**	RunNo: **67723**
Prep Date:	Analysis Date: **3/31/2020**	SeqNo: **2338026** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A67723**	RunNo: **67723**
Prep Date:	Analysis Date: **3/31/2020**	SeqNo: **2338027** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	99.8	80	120			
Manganese	0.51	0.0020	0.5000	0	101	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 range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2003C85**
07-Apr-20

Client: Animas Environmental Services
Project: BMG Hwy 537 2008

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **C67855**	RunNo: **67855**
Prep Date:	Analysis Date: **4/4/2020**	SeqNo: **2343984** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.9		10.00		98.9	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **C67855**	RunNo: **67855**
Prep Date:	Analysis Date: **4/4/2020**	SeqNo: **2343985** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.42	0.050	0.5000	0	84.8	70	130			
Surr: BFB	10		10.00		101	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Work Order Number: 2003C85 RcptNo: 1

Received By: **Juan Rojas** 3/27/2020 8:10:00 AM

Completed By: **John Caldwell** 3/30/2020 2:42:45 PM

Reviewed By: ~~3/30/20 MB~~ 3/30/20 MB

Chain of Custody

1. Is Chain of Custody sufficiently 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				

Chain-of-Custody Record

Client: Animas Environmental Services

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

Phone #: 505-564-2281

Email or Fax#: emcnally@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 - 2008

Project #:

Project Manager:
Elizabeth McNally

Sampler: GB /~~BD~~ CL
On Ice: ~~☐~~ Yes ☐ No 0.1-0=0.1
Sample Temperature: -0.6-0=-0.6

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2003085	BTEX (8021)	TPH (GRO, DRO, MRO) - (8015)	Dissolved Iron and Manganese - (6020)	TDS	Air Bubbles (Y or N)
3-25-20	12:35	H2O	MW-9R	5 - 40 mL VOA 250 mL amber glass 1 - 125 mL plastic	5 - $HgCl_2$ 1 - cool 1 - HNO_3	-001	X	X	X		
		H2O	~~MW-7~~	1 - 500 mL plastic 1 - 125 mL plastic	1 - cool 1 - HNO_3				X	CL X	
		H2O	Trip Blanks	2 - 40 mL VOA	2 - HgCl	-002	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
3/26/20	1715			3/26/20	1715
Date:	Time:	Relinquished by:	Received by:	Date	Time
3/26/20	1813		courier	3/27/20	8:10

MW-9R had crude oil sheen.
Not frozen JR 3/27/20

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 rep

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 01, 2020

Elizabeth McNally

Animas Environmental Services
604 Pinon Street
Farmington, NM 87401
TEL: (505) 564-2281
FAX:

RE: BMG Hwy 537- 2008 OrderNo.: 2006C00

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/24/2020 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 **2006C00**
Date Reported: **7/1/2020**

CLIENT: Animas Environmental Services
Client Sample ID: MW-9R
Project: BMG Hwy 537- 2008
Collection Date: 6/23/2020 11:22:00 AM
Lab ID: 2006C00-001 **Matrix:** AQUEOUS **Received Date:** 6/24/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **DJF**	
Gasoline Range Organics (GRO)	0.86	0.050		mg/L	1	6/26/2020 7:38:19 PM	G69947
Surr: BFB	112	70-130		%Rec	1	6/26/2020 7:38:19 PM	G69947
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**	
Diesel Range Organics (DRO)	46	1.0		mg/L	1	6/28/2020 8:50:51 AM	53358
Motor Oil Range Organics (MRO)	20	5.0		mg/L	1	6/28/2020 8:50:51 AM	53358
Surr: DNOP	130	70-130		%Rec	1	6/28/2020 8:50:51 AM	53358
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	6/26/2020 7:38:19 PM	SL69947
Toluene	ND	1.0		µg/L	1	6/26/2020 7:38:19 PM	SL69947
Ethylbenzene	11	1.0		µg/L	1	6/26/2020 7:38:19 PM	SL69947
Xylenes, Total	23	1.5		µg/L	1	6/26/2020 7:38:19 PM	SL69947
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	6/26/2020 7:38:19 PM	SL69947
Surr: 4-Bromofluorobenzene	60.7	70-130	S	%Rec	1	6/26/2020 7:38:19 PM	SL69947
Surr: Dibromofluoromethane	111	70-130		%Rec	1	6/26/2020 7:38:19 PM	SL69947
Surr: Toluene-d8	108	70-130		%Rec	1	6/26/2020 7:38:19 PM	SL69947

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 range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2006C00**
Date Reported: **7/1/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-7
Project: BMG Hwy 537- 2008
Collection Date: 6/23/2020 10:45:00 AM
Lab ID: 2006C00-002
Matrix: AQUEOUS
Received Date: 6/24/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **ELS**	
Iron	0.11	0.020		mg/L	1	6/25/2020 11:03:03 AM	A69910
Manganese	0.18	0.0020		mg/L	1	6/25/2020 11:03:03 AM	A69910

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006C00**

01-Jul-20

Client: Animas Environmental Services

Project: BMG Hwy 537- 2008

Sample ID: **2006C00-001BMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MW-9R**	Batch ID: **53358**	RunNo: **69959**
Prep Date: **6/27/2020**	Analysis Date: **6/28/2020**	SeqNo: **2429981** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	34	1.0	5.000	45.51	-238	70	130			S
Surr: DNOP	0.62		0.5000		125	70	130			

Sample ID: **2006C00-001BMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **MW-9R**	Batch ID: **53358**	RunNo: **69959**
Prep Date: **6/27/2020**	Analysis Date: **6/28/2020**	SeqNo: **2429982** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	28	1.0	5.000	45.51	-349	70	130	17.9	20	S
Surr: DNOP	0.55		0.5000		110	70	130	0	0	

Sample ID: **LCS-53358**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **53358**	RunNo: **69959**
Prep Date: **6/27/2020**	Analysis Date: **6/28/2020**	SeqNo: **2429996** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	107	70	130			
Surr: DNOP	0.52		0.5000		103	70	130			

Sample ID: **MB-53358**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **53358**	RunNo: **69959**
Prep Date: **6/27/2020**	Analysis Date: **6/28/2020**	SeqNo: **2429997** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.4		1.000		144	70	130			S

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006C00**
01-Jul-20

Client: Animas Environmental Services
Project: BMG Hwy 537- 2008

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **SL69947**	RunNo: **69947**
Prep Date:	Analysis Date: **6/26/2020**	SeqNo: **2429275** 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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.1	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **SL69947**	RunNo: **69947**
Prep Date:	Analysis Date: **6/26/2020**	SeqNo: **2429276** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	114	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.6	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.4	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006C00**

01-Jul-20

Client: Animas Environmental Services

Project: BMG Hwy 537- 2008

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **PBW**	Batch ID: **A69910**	RunNo: **69910**
Prep Date:	Analysis Date: **6/25/2020**	SeqNo: **2427621** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LCS**	SampType: **LCS**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **LCSW**	Batch ID: **A69910**	RunNo: **69910**
Prep Date:	Analysis Date: **6/25/2020**	SeqNo: **2427622** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.45	0.020	0.5000	0	89.3	80	120			
Manganese	0.45	0.0020	0.5000	0	89.7	80	120			

Sample ID: **2006C00-002AMS**	SampType: **MS**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **MW-7**	Batch ID: **A69910**	RunNo: **69910**
Prep Date:	Analysis Date: **6/25/2020**	SeqNo: **2427640** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.56	0.020	0.5000	0.1060	90.1	75	125			
Manganese	0.62	0.0020	0.5000	0.1808	88.1	75	125			

Sample ID: **2006C00-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 6010B: Dissolved Metals**
Client ID: **MW-7**	Batch ID: **A69910**	RunNo: **69910**
Prep Date:	Analysis Date: **6/25/2020**	SeqNo: **2427641** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.55	0.020	0.5000	0.1060	89.5	75	125	0.502	20	
Manganese	0.61	0.0020	0.5000	0.1808	86.1	75	125	1.66	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 range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2006C00**

01-Jul-20

Client: Animas Environmental Services

Project: BMG Hwy 537- 2008

Sample ID: **mb2**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **G69947**	RunNo: **69947**
Prep Date:	Analysis Date: **6/27/2020**	SeqNo: **2429314** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.7		10.00		97.2	70	130			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **G69947**	RunNo: **69947**
Prep Date:	Analysis Date: **6/26/2020**	SeqNo: **2429315** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.41	0.050	0.5000	0	81.5	70	130			
Surr: BFB	10		10.00		99.6	70	130			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: Animas Environmental Services | Work Order Number: 2006C00 | RcptNo: 1

Received By: **Emily Mocho** 6/24/2020 8:00:00 AM

Completed By: **Juan Rojas** 6/24/2020 8:32:46 AM

Reviewed By: JR 6/24/20 JR 6/24/20

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: EM 6/24/20

Special Handling (if applicable)

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

Person Notified: Date

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

Regarding:

Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.9	Good				

Chain-of-Custody Record

Client: Animas Environmental Services

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

Phone #: 505-564-2281

Email or Fax#: emcnally@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 - 2008

Project #:

Project Manager: Elizabeth McNally

Sampler: GB / ~~BD~~ CL

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.1 - 0.2 = 3.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
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. 700 LCUO	BTEX (8021)	TPH (GRO, DRO, MRO) - (8015)	Dissolved Iron and Manganese - (6020)	TDS	Air Bubbles (Y or N)
6-23-20	11:22	H2O	MW-9R	5 - 40 mL VOA 250 mL amber glass ~~1 - 125 mL plastic~~ CL	5 - HgCl 1 - cool ~~1 - HNO3~~ CL	-001	X	X	~~X~~ CL		
6-23-20	10:45	H2O	MW-7	~~1 - 500 mL plastic~~ CL 1 - 125 mL plastic	~~1 - cool~~ CL 1 - HNO3	-002			X	CL ~~X~~	
		H2O	Trip Blanks EM 6/24/20	2 - 40 mL VOA	2 - HgCl	-003	X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
6/23/2020	1552			6/23/2020	1552
Date:	Time:	Relinquished by:	Received by:	Date	Time
6/23/2020	1920		EKM courier	6/24/20	800

Insufficient water for MW-7 for complete sample.

Did not receive trip blanks EM 6/24/20

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

October 02, 2020

Elizabeth McNally

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

RE: BMG Hwy 537 2008 OrderNo.: 2009E81

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/24/2020 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 **2009E81**
Date Reported: **10/2/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9R
Project: BMG Hwy 537 2008
Collection Date: 9/23/2020 11:55:00 AM
Lab ID: 2009E81-001 **Matrix:** AQUEOUS **Received Date:** 9/24/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	3.8	0.25		mg/L	5	9/29/2020 1:02:17 AM	G72220
Surr: BFB	92.9	70-130		%Rec	5	9/29/2020 1:02:17 AM	G72220
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**	
Diesel Range Organics (DRO)	550	20		mg/L	20	9/30/2020 12:35:58 PM	55529
Motor Oil Range Organics (MRO)	270	100		mg/L	20	9/30/2020 12:35:58 PM	55529
Surr: DNOP	0	70-130	S	%Rec	20	9/30/2020 12:35:58 PM	55529
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	5.0		µg/L	5	9/29/2020 1:02:17 AM	L72220
Toluene	ND	5.0		µg/L	5	9/29/2020 1:02:17 AM	L72220
Ethylbenzene	38	5.0		µg/L	5	9/29/2020 1:02:17 AM	L72220
Xylenes, Total	100	7.5		µg/L	5	9/29/2020 1:02:17 AM	L72220
Surr: 1,2-Dichloroethane-d4	95.9	70-130		%Rec	5	9/29/2020 1:02:17 AM	L72220
Surr: Dibromofluoromethane	92.9	70-130		%Rec	5	9/29/2020 1:02:17 AM	L72220
Surr: Toluene-d8	101	70-130		%Rec	5	9/29/2020 1:02:17 AM	L72220

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

Qualifiers:

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

Analytical Report
Lab Order **2009E81**
Date Reported: **10/2/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2008 **Collection Date:**
Lab ID: 2009E81-002 **Matrix:** TRIP BLANK **Received Date:** 9/24/2020 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	9/27/2020 9:20:08 PM	R72182
Toluene	ND	1.0		µg/L	1	9/27/2020 9:20:08 PM	R72182
Ethylbenzene	ND	1.0		µg/L	1	9/27/2020 9:20:08 PM	R72182
Xylenes, Total	ND	1.5		µg/L	1	9/27/2020 9:20:08 PM	R72182
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%Rec	1	9/27/2020 9:20:08 PM	R72182
Surr: Dibromofluoromethane	110	70-130		%Rec	1	9/27/2020 9:20:08 PM	R72182
Surr: Toluene-d8	100	70-130		%Rec	1	9/27/2020 9:20:08 PM	R72182

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2009E81**

02-Oct-20

Client: Animas Environmental Services

Project: BMG Hwy 537 2008

Sample ID: **LCS-55529**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **55529**	RunNo: **72261**
Prep Date: **9/29/2020**	Analysis Date: **9/30/2020**	SeqNo: **2535525** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.3	1.0	5.000	0	107	70	130			
Surr: DNOP	0.50		0.5000		100	70	130			

Sample ID: **MB-55529**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **55529**	RunNo: **72261**
Prep Date: **9/29/2020**	Analysis Date: **9/30/2020**	SeqNo: **2535526** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.91		1.000		91.4	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2009E81**

02-Oct-20

Client: Animas Environmental Services

Project: BMG Hwy 537 2008

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **R72182**	RunNo: **72182**
Prep Date:	Analysis Date: **9/27/2020**	SeqNo: **2530705** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	88.9	70	130			
Toluene	20	1.0	20.00	0	97.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.7	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	9.7		10.00		96.9	70	130			

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **R72182**	RunNo: **72182**
Prep Date:	Analysis Date: **9/27/2020**	SeqNo: **2530706** 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								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.6	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID: **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW**	Batch ID: **L72220**	RunNo: **72220**
Prep Date:	Analysis Date: **9/28/2020**	SeqNo: **2532581** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	90.9	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.4	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.1	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.4	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW**	Batch ID: **L72220**	RunNo: **72220**
Prep Date:	Analysis Date: **9/28/2020**	SeqNo: **2532582** 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								

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009E81**
02-Oct-20

Client: Animas Environmental Services
Project: BMG Hwy 537 2008

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8260: Volatiles Short List**							
Client ID: **PBW**	Batch ID: **L72220**	RunNo: **72220**							
Prep Date:	Analysis Date: **9/28/2020**	SeqNo: **2532582**	Units: **µg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.6	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2009E81**

02-Oct-20

Client: Animas Environmental Services

Project: BMG Hwy 537 2008

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSW**	Batch ID: **G72220**	RunNo: **72220**
Prep Date:	Analysis Date: **9/29/2020**	SeqNo: **2532386** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.37	0.050	0.5000	0	73.2	70	130			
Surr: BFB	8.5		10.00		84.7	70	130			

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBW**	Batch ID: **G72220**	RunNo: **72220**
Prep Date:	Analysis Date: **9/28/2020**	SeqNo: **2532387** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	9.4		10.00		94.3	70	130			

Sample ID: **2009e81-001a ms**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MW-9R**	Batch ID: **G72220**	RunNo: **72220**
Prep Date:	Analysis Date: **9/29/2020**	SeqNo: **2532389** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	3.2	0.25	2.500	3.759	-23.6	70	130			S
Surr: BFB	42		50.00		83.8	70	130			

Sample ID: **2009e81-001a msd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **MW-9R**	Batch ID: **G72220**	RunNo: **72220**
Prep Date:	Analysis Date: **9/29/2020**	SeqNo: **2532390** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	2.8	0.25	2.500	3.759	-37.0	70	130	11.2	20	S
Surr: BFB	41		50.00		82.8	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 range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental Se** Work Order Number: **2009E81** RcptNo: **1**

Received By: **Isaiah Ortiz** **9/24/2020 8:30:00 AM** I-Ox

Completed By: **Isaiah Ortiz** **9/24/2020 2:30:35 PM** I-Ox

Reviewed By: JR 9/25/20

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 ☑ ~~No ☑~~ CMA 9/25/20	
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 CMA 9/25/20

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: ~~2 of 2~~ CMA 9/25/20 1 Trip Blank Received Broken

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good	Not Present			

Chain-of-Custody Record

Client: Animas Environmental Services

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

Phone #: 505-564-2281

Email or Fax#: emcnally@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 - 2008

Project #:

Project Manager: Elizabeth McNally

Sampler: GB

On Ice: ☒ Yes ☐ No

Sample Temperature: 6.0 ICF 0.6°

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2009E81	BTEX (8021)	TPH (GRO, DRO, MRO) - (8015)											Air Bubbles (Y or N)
9.23.20	1155	H2O	MW-9R	5 - 40 mL VOA 1-250 mL amber glass	5 - HgCl2 1 - cool	001	X	X											
		H2O	Trip Blanls	2- 40 mL VOA	2 - HgCl2	002	X	X											

Date:	Time:	Relinquished by:	Received by:	Date	Time
9/23/2020	1640	[signature]	[signature]	9/23/2020	1640
9/23/2020	1816		[signature]	9/24/20	0830

Notes:
~~Bill~~ Direct Bill to BMG.

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 rep

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

December 10, 2020

Elizabeth McNally

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

RE: BMG Hwy 537 2008 OrderNo.: 2011C53

Dear Elizabeth McNally:

Hall Environmental Analysis Laboratory received 3 sample(s) on 11/25/2020 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 **2011C53**
Date Reported: **12/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services
Client Sample ID: MW-9R
Project: BMG Hwy 537 2008
Collection Date: 11/23/2020 11:56:00 AM
Lab ID: 2011C53-001 **Matrix:** AQUEOUS **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE						Analyst: **BRM**	
Diesel Range Organics (DRO)	250	10		mg/L	10	12/1/2020 10:56:55 AM	56699
Motor Oil Range Organics (MRO)	120	50		mg/L	10	12/1/2020 10:56:55 AM	56699
Surr: DNOP	0	70-130	S	%Rec	10	12/1/2020 10:56:55 AM	56699
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	1.0	0.25		mg/L	5	11/30/2020 11:51:13 AM	G73678
Surr: BFB	153	66.7-119	S	%Rec	5	11/30/2020 11:51:13 AM	G73678
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	5.0	D	µg/L	5	11/30/2020 11:51:13 AM	B73678
Toluene	ND	5.0	D	µg/L	5	11/30/2020 11:51:13 AM	B73678
Ethylbenzene	12	5.0	D	µg/L	5	11/30/2020 11:51:13 AM	B73678
Xylenes, Total	29	10	D	µg/L	5	11/30/2020 11:51:13 AM	B73678
Surr: 4-Bromofluorobenzene	103	80-120	D	%Rec	5	11/30/2020 11:51:13 AM	B73678

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

Qualifiers:

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

Analytical Report
Lab Order **2011C53**
Date Reported: **12/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services **Client Sample ID:** Trip Blank
Project: BMG Hwy 537 2008 **Collection Date:**
Lab ID: 2011C53-003 **Matrix:** TRIP BLANK **Received Date:** 11/25/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.0		µg/L	1	11/30/2020 12:38:04 PM	B73678
Toluene	ND	1.0		µg/L	1	11/30/2020 12:38:04 PM	B73678
Ethylbenzene	ND	1.0		µg/L	1	11/30/2020 12:38:04 PM	B73678
Xylenes, Total	ND	2.0		µg/L	1	11/30/2020 12:38:04 PM	B73678
Surr: 4-Bromofluorobenzene	96.8	80-120		%Rec	1	11/30/2020 12:38:04 PM	B73678

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

Qualifiers:

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

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Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

ANALYTICAL SUMMARY REPORT

December 09, 2020

Hall Environmental
4901 Hawkins St NE Ste D
Albuquerque, NM 87109-4372

Work Order: B20120187

Project Name: Not Indicated

Energy Laboratories Inc Billings MT received the following 1 sample for Hall Environmental on 12/2/2020 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B20120187-001	2011C53-002A, Crude Oil	11/23/20 12:06	12/02/20	Oil	Kinematic Viscosity

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

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Gillette, WY 866.686.7175 • Helena, MT 877.472.0711

CLIENT: Hall Environmental
Project: Not Indicated
Work Order: B20120187

Report Date: 12/09/20

CASE NARRATIVE

Tests associated with analyst identified as ELI-G were subcontracted to Energy Laboratories, 400 W Boxelder Rd, Gillette, WY, EPA Number WY00006.

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LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Hall Environmental
Project: Not Indicated
Lab ID: B20120187-001
Client Sample ID: 2011C53-002A, Crude Oil

Report Date: 12/09/20
Collection Date: 11/23/20 12:06
DateReceived: 12/02/20
Matrix: Oil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
KINEMATIC VISCOSITY							
Kinematic Viscosity @ 100 F	6.27	cSt		0.10		D445	12/04/20 08:08 / eli-g
Kinematic Viscosity @ 120 F	4.79	cSt		0.10		D445	12/04/20 08:50 / eli-g

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)

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Work Order Receipt Checklist

Hall Environmental

B20120187

Login completed by: Leslie S. Cadreau
Date Received: 12/2/2020
Reviewed by: BL2000\gmccartney
Received by: dac
Reviewed Date: 12/7/2020
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	4.5°C Blue Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

Contact and Corrective Action Comments:

None

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

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

SUB CONTRATOR	**Energy Labs -Billings**	COMPANY	**Energy Laboratories**	PHONE	**(406) 869-6253**	FAX	**(406) 252-6069**
ADDRESS	**1120 South 27th Street**			ACCOUNT #		EMAIL	
CITY STATE ZIP	**Billings, MT 59107**						

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	2011C53-002A	Crude Oil	500HDPE	Oil	11/23/2020 12:06:00 PM	1	Viscosity

B20120187

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports Please e-mail results to lab@hallenvironmental com Please return all coolers and blue ice Thank you

Relinquished By		Date 11/30/2020	Time 9:31 AM	Received By	Dylan Cha	Date 12/2/20	Time 10:35
Relinquished By		Date	Time	Received By		Date	Time
Relinquished By		Date	Time	Received By		Date	Time

TAT Standard X RUSH Next BD 2nd BD 3rd BD

REPORT TRANSMITTAL DESIRED

HARDCOPY (extra cost) FAX EMAIL ONLINE

FOR LAB USE ONLY

Temp of samples °C Attempt to Cool ?

Comments

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2011C53**

10-Dec-20

Client: Animas Environmental Services

Project: BMG Hwy 537 2008

Sample ID: **LCS-56699**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **LCSW**	Batch ID: **56699**	RunNo: **73695**
Prep Date: **11/30/2020**	Analysis Date: **12/1/2020**	SeqNo: **2598039** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	109	70	130			
Surr: DNOP	0.59		0.5000		118	70	130			

Sample ID: **MB-56699**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range**
Client ID: **PBW**	Batch ID: **56699**	RunNo: **73695**
Prep Date: **11/30/2020**	Analysis Date: **12/1/2020**	SeqNo: **2598040** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	1.1		1.000		110	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011C53**
10-Dec-20

Client: Animas Environmental Services
Project: BMG Hwy 537 2008

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBW**	Batch ID: **G73678**	RunNo: **73678**							
Prep Date:	Analysis Date: **11/30/2020**	SeqNo: **2596780**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	20		20.00		99.2	66.7	119			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSW**	Batch ID: **G73678**	RunNo: **73678**							
Prep Date:	Analysis Date: **11/30/2020**	SeqNo: **2596781**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.54	0.050	0.5000	0	108	72.5	114			
Surr: BFB	23		20.00		116	66.7	119			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011C53**
10-Dec-20

Client: Animas Environmental Services
Project: BMG Hwy 537 2008

Sample ID: **mb1**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBW**	Batch ID: **B73678**	RunNo: **73678**
Prep Date:	Analysis Date: **11/30/2020**	SeqNo: **2596795** 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								
Xylenes, Total	ND	2.0								
Surr: 4-Bromofluorobenzene	20		20.00		98.2	80	120			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSW**	Batch ID: **B73678**	RunNo: **73678**
Prep Date:	Analysis Date: **11/30/2020**	SeqNo: **2596796** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	93.2	80	120			
Toluene	19	1.0	20.00	0	97.0	80	120			
Ethylbenzene	19	1.0	20.00	0	97.3	80	120			
Xylenes, Total	58	2.0	60.00	0	97.3	80	120			
Surr: 4-Bromofluorobenzene	20		20.00		102	80	120			

Sample ID: **2011c53-001ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-9R**	Batch ID: **B73678**	RunNo: **73678**
Prep Date:	Analysis Date: **11/30/2020**	SeqNo: **2596806** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	94	5.0	100.0	1.280	93.1	80	120			
Toluene	97	5.0	100.0	0	96.9	80	120			
Ethylbenzene	110	5.0	100.0	11.62	94.1	80	120			
Xylenes, Total	320	10	300.0	29.35	95.6	80	120			
Surr: 4-Bromofluorobenzene	100		100.0		104	80	120			

Sample ID: **2011c53-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **MW-9R**	Batch ID: **B73678**	RunNo: **73678**
Prep Date:	Analysis Date: **11/30/2020**	SeqNo: **2596807** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	93	5.0	100.0	1.280	91.5	80	120	1.71	20	
Toluene	95	5.0	100.0	0	95.4	80	120	1.58	20	
Ethylbenzene	100	5.0	100.0	11.62	92.4	80	120	1.61	20	
Xylenes, Total	310	10	300.0	29.35	95.0	80	120	0.514	20	
Surr: 4-Bromofluorobenzene	100		100.0		104	80	120	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 range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **Animas Environmental Services** Work Order Number: **2011C53** RcptNo: 1

Received By: **Sean Livingston** **11/25/2020 8:00:00 AM** Sean Livingston

Completed By: **Desiree Dominguez** **11/25/2020 9:51:09 AM** DD

Reviewed By: JR 11/25/20

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: SGL 11/25/20

Special Handling (if applicable)

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

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

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good	Yes			

Chain-of-Custody Record

Client: Animas Environmental Services

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

Phone #: 505-564-2281

Email or Fax#: emcnally@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 - 2008

Project #:

Project Manager:
Elizabeth McNally
Eddie Hubbert

Sampler: GB/CL
On Ice: ☑ Yes ☐ No
Sample Temperature: 2.9 + 0.3 = 3.2°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
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. 2011C53	BTEX (8021)	TPH (GRO, DRO, MRO) - (8015)	Viscosity								Air Bubbles (Y or N)
11-23-20	11:56	H2O	MW-9R	5 - 40 mL VOA 1-250 mL amber glass	5 - HgCl2 1 - cool	-001	X	X									
11-23-20	12:06	Crude oil	Crude oil	1-500mL plastic	1-cool	-002			X								
		H2O	Trip Blanks	2- 40 mL VOA	2 - HgCl2	-003	X	X									

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date	Time
11.24.20	1045		SGL courier	11/25/20	8:00
Date:	Time:	Relinquished by:	Received by:	Date	Time

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

Call w/ Questions
MW9R had NAPL.

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

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 28796

CONDITIONS

Operator:	OGRID:
BENSON-MONTIN-GREER DRILLING CORP 4900 College Blvd. Farmington, NM 87402	2096
	Action Number: 28796
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Review of Q1 through Q4 2020 Progress Report: Content satisfactory 1. Follow recommendations stated within the aforementioned report to conduct groundwater monitoring and sampling in MW-1. a. Quarterly: Volatile organics (USEPA Method 8260) b. Annual: Phenols (SW-846 9067) and dissolved manganese (USEPA Method 200.7) c. Gauge all wells for depth to groundwater on a quarterly basis d. Measure water quality parameters in all wells on an annual basis e. Replace absorbent sock in MW-1 if needed f. Submit the next progress report to the OCD no later than March 31, 2022	1/6/2022