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Q2 GWMR

09 / 23 / 2013

September 23, 2013

Glenn von Gonten
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

**Re: Periodic Progress Report 2nd Qtr 2013
Benson-Montin-Greer
Highway 537 Truck Receiving Station 2009 Release
Rio Arriba County, New Mexico**

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Animas Environmental Services, LLC

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Dear Mr. von Gonten:

On behalf of Benson-Montin-Greer Drilling Corporation (BMG), Animas Environmental Services, LLC (AES) has prepared this Periodic Progress Report, which provides details of groundwater monitoring and sampling conducted for the 2nd Quarter 2013 in June 2013 at the BMG Highway 537 Truck Receiving Station 2009 release location. Sampling was conducted in accordance with recommendations presented in the Site Investigation Report prepared by AES and submitted on April 10, 2009.

1.0 Site Information

The BMG Highway 537 Truck Receiving Station consists of eight 500 barrel (bbl) oil storage tanks, one 600 bbl oil storage tank, one 80 bbl open top waste tank, and various pumps and meters associated with crude oil transport truck loading, unloading, and pipeline transport. Surface ownership in the area where the release occurred includes private land owned by the Schmitz Ranch.

1.1 Site Location

The truck receiving station is located along the south side of NM State Highway 537 and is adjacent to the Los Ojitos Arroyo, which eventually drains to Largo Canyon. The facility is described legally as being located within the SW¼ NW¼ Section 18, T25N, R3W in Rio Arriba County, New Mexico. Latitude and longitude were recorded as being N36.39866 and W107.19328, respectively. A topographic site location map, based on an excerpt from the United States Geological Survey (USGS) 7.5-minute Schmitz Ranch, Rio Arriba County, New Mexico topographic quadrangle (USGS 1963), is included as Figure 1. An aerial map with a site plan, including existing monitor wells, is presented as Figure 2.

1.2 Release History

On January 29, 2009, a Western Refining truck driver discovered crude condensate within the bermed area around the storage tanks, on the south side of Tank #1. BMG personnel arrived on-site and confirmed a leak at a buried 6-inch line between the storage tanks and the truck loading pump. BMG isolated the line and emptied it of residual oil. BMG then contacted Brandon Powell of New Mexico Oil Conservation Division (NMOCD) to provide notification and intended response to the release. Also on January 29, 2009, BMG contracted with TNT Excavating (TNT) to remove the buried 6-inch line in order to determine where the leak originated.

On January 30, 2009, TNT used a trackhoe to excavate an area (10 feet by 20 feet by 15 feet in depth) around the buried 6-inch line. AES collected soil samples from the base of the excavation for field screening with a photo-ionization detector (PID) organic vapor meter (OVM). Field screening results at 12 feet below ground surface (bgs) were 5,861 parts per million (ppm) volatile organic compounds (VOCs), and at 15 feet bgs VOCs were measured at 6,640 ppm. Additionally, AES collected one soil sample at 15 feet bgs for laboratory analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH). The analytical results of the soil sample collected on January 30, 2009, had total BTEX concentrations of 1,657 mg/kg and total TPH concentrations of 20,300 mg/kg.

The release was the result of a corrosion hole along the bottom of the pipe near the truck loading pumps. Because it was determined that the leak had impacted soils to at least 15 feet bgs, and due to the presence of tanks, buried pipe, buried conduit, and fixed pumps and meters within the release area, BMG and AES, in consultation with NMOCD, concluded that an assessment of the release area by installing soil borings and monitor wells would be the most appropriate assessment method.

On February 2, 2009, the 6-inch line was repaired, and the excavation was backfilled with clean fill material. Approximately 100 cubic yards of contaminated soil were transported to the TNT Landfarm for disposal. From February 16 through 20, 2009, site investigation activities were conducted by AES in order to delineate the full extent of petroleum hydrocarbon impact on surface and subsurface soils and groundwater resulting from the release. The investigation procedures included the installation of 11 monitor wells (MW-1 through MW-11) and collection of soil and groundwater samples. Work was completed in accordance with the *Sampling and Analysis Plan* prepared by AES and dated February 3, 2009, and also in accordance with U.S. Environmental Protection Agency (USEPA) Environmental Response Team's Standard Operating Procedures (SOPs), and applicable American Society of Testing and Materials (ASTM) standards. Details of the site investigation are included in the *AES Site Investigation Report* submitted to NMOCD in April 2009.

2.0 Groundwater Monitoring and Sampling – June 2013

The second quarterly groundwater and sampling event of 2013 was conducted by AES personnel on June 27 and July 1, 2013. Groundwater samples from MW-1, MW-3, MW-8, and MW-9 were laboratory analyzed for BTEX per USEPA Method 8021 and TPH per USEPA Method 8015 at Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico, as well as field analyzed for temperature, conductivity, dissolved oxygen (DO), pH, and ORP. No samples were analyzed from MW-2, MW-4 through MW-7, MW-10, and MW-11 because these wells have remained below laboratory detection limits for BTEX and TPH for eight or more consecutive sampling events.

2.1 *Groundwater Measurements and Water Quality Data*

During the June 2013 sampling event, groundwater measurements were recorded for MW-1 through MW-11. Average groundwater elevations decreased across the site by an average of 0.55 feet since the March 2013 sampling event. Groundwater gradient was calculated between MW-2 and MW-8, with a magnitude of 0.007 ft/ft to the southwest. Groundwater elevations ranged from 15.60 feet below top of casing (TOC) in MW-6 to 30.66 feet below TOC in MW-11. Groundwater elevation data and contours are presented in Figure 3.

Groundwater quality measurements were recorded for MW-1, MW-3, MW-8, and MW-9. Recorded temperatures ranged from 13.52°C in MW-1 to 20.04°C in MW-9. Groundwater pH measurements ranged from 7.01 to 7.69, and DO concentrations were between 2.38 mg/L in MW-9 and 5.43 mg/L in MW-3. ORP measurements were between -48.5 mV in MW-9 and 9.2 mV in MW-1, and conductivity readings were between 4.119 mS/cm and 6.908 mS/cm. Depth to groundwater measurements and water quality data are presented in Table 1. Water Sample Collection Forms are included in the Appendix.

2.2 *Groundwater Analytical Results*

Dissolved phase benzene, toluene, ethylbenzene, and xylene concentrations were below applicable New Mexico Water Quality Control Commission (WQCC) standards in each of the wells sampled. TPH concentrations as GRO above laboratory detection limits were reported in MW-1 (0.09 mg/L), MW-3 (0.11 mg/L), and MW-8 (0.052 mg/L), and TPH concentrations (as DRO and MRO) were reported below the laboratory detection limits in all wells sampled. Tabulated laboratory analytical results are included in Table 2. Contaminant concentrations are included in Figure 4, and Graphs 1 through 4 present groundwater elevations and dissolved phase benzene concentrations for MW-1, MW-3, MW-8, and MW-9, respectively. Laboratory analytical reports for June and July 2013 are included in the Appendix.

3.0 Conclusions and Recommendations

AES conducted groundwater monitoring and sampling at the BMG Highway 537 Truck Receiving Station on June 27 and July 1, 2013. Groundwater elevations were found to have decreased in all wells by approximately 0.55 feet since March 2013. Groundwater gradient was calculated to be approximately 0.007 ft/ft in a southwestern direction, which is consistent with historic site data.

Groundwater samples were collected from monitor wells MW-1, MW-3, MW-8, and MW-9. Monitor wells MW-2, MW-4 through MW-7, MW-10, and MW-11 have remained below the WQCC standards for BTEX and below laboratory detection limits for TPH for eight consecutive sampling events and therefore were not sampled in June 2013.

The dissolved phase benzene concentration in MW-1 was reported below the WQCC standard of 10 µg/L for the third consecutive quarter. Benzene concentrations have remained below the WQCC standard for the fourth consecutive quarter in MW-3, the eighth consecutive quarter in MW-8, and the fifth consecutive quarter in MW-9. Dissolved phase toluene, ethylbenzene, and xylenes have remained below the applicable WQCC standards in each of the wells. GRO concentrations above the laboratory detection limit were reported in MW-1 (0.09 mg/L), MW-3 (0.11 mg/L), and MW-8 (0.052 mg/L). DRO and MRO concentrations were reported below the laboratory detection limits in each of the wells sampled during the June 2013 sampling event.

Based on laboratory analytical results, AES recommends continuing groundwater monitoring and sampling of monitor wells MW-1, MW-3, and MW-9 on a quarterly basis. AES further recommends continued groundwater monitoring and sampling of MW-8 on an annual basis since it has remained below WQCC standards for BTEX for eight consecutive quarters.

4.0 Scheduled Site Activities

The third quarter 2013 groundwater sampling event was conducted in September 2013, and a report will be prepared and submitted upon receipt of laboratory analytical results.

If you have any questions regarding this report or site conditions, please do not hesitate to contact Deborah Watson or Ross Kennemer at (505) 564-2281.

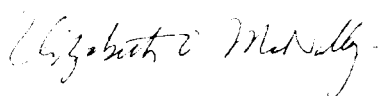
Sincerely,



David Reese
Environmental Scientist



Deborah Watson, P.G.
Project Manager



Elizabeth McNally, P.E.

Tables

Table 1. Summary of Groundwater Measurement and Water Quality Data

Table 2. Summary of Groundwater Analytical Results

Figures

Figure 1. Topographic Site Location Map

Figure 2. Aerial Map with General Site Plan

Figure 3. Groundwater Elevation Contours, June 2013

Figure 4. Groundwater Contaminant Concentrations, June 2013

Graphs

Graph 1. MW-1 Groundwater Elevations and Benzene Concentrations, June 2013

Graph 2. MW-3 Groundwater Elevations and Benzene Concentrations, June 2013

Graph 3. MW-8 Groundwater Elevations and Benzene Concentrations, June 2013

Graph 4. MW-9 Groundwater Elevations and Benzene Concentrations, June 2013

Appendix

Water Sample Collection Forms 062713 and 070113

Hall Analytical Reports 1307017 and 1307184

cc:

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TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	pH	ORP (mV)
MW-1	05-Mar-09	27.95	7064.66	7036.71	12.29	5.231	1.27	6.64	-36.1
MW-1	11-Sep-09	28.66	7064.66	7036.00	13.15	7.016	0.65	8.60	-118.5
MW-1	15-Jan-10	28.91	7064.66	7035.75	13.30	3.714	2.74	6.79	-167.8
MW-1	15-Oct-10	29.20	7064.66	7035.46	13.77	4.642	1.51	7.14	-17.9
MW-1	21-Jan-11	29.28	7064.66	7035.38	12.42	4.246	1.63	6.92	-85.8
MW-1	12-May-11	28.93	7064.66	7035.73	13.08	3.830	2.95	7.00	-96.1
MW-1	12-Aug-11	29.67	7064.66	7034.99	14.03	4.637	3.83	6.94	-107.9
MW-1	16-Nov-11	29.82	7064.66	7034.84	11.57	4.385	2.89	5.35	-69.7
MW-1	21-Feb-12	29.77	7064.66	7034.89	12.01	4.063	1.09	6.78	-123.9
MW-1	24-May-12	29.77	7064.66	7034.89	12.94	4.563	1.04	6.95	-46.5
MW-1	10-Sep-12	30.14	7064.66	7034.52	14.63	4.705	1.16	7.12	-15.7
MW-1	04-Dec-12	30.33	7064.66	7034.33	12.55	4.430	1.30	7.11	-7.1
MW-1	26-Mar-13	29.87	7064.66	7034.79	12.20	4.556	1.66	6.72	-5.9
MW-1	01-Jul-13	30.41	7064.66	7034.25	13.52	4.372	3.61	7.18	9.2
MW-2	05-Mar-09	27.69	7064.65	7036.96	12.00	4.567	2.59	6.82	-29.8
MW-2	10-Sep-09	28.38	7064.65	7036.27	12.93	6.480	1.09	7.58	62.2
MW-2	15-Jan-10	28.62	7064.65	7036.03	12.49	3.604	2.10	7.57	-70.3
MW-2	14-Oct-10	28.91	7064.65	7035.74	12.49	3.968	1.71	7.40	98.9
MW-2	21-Jan-11	28.99	7064.65	7035.66	11.44	4.045	1.62	8.56	-6.2
MW-2	12-May-11	28.63	7064.65	7036.02	13.14	4.087	1.43	7.67	-66.7
MW-2	12-Aug-11	29.37	7064.65	7035.28	14.08	4.102	4.36	7.09	160.2
MW-2	16-Nov-11	29.52	7064.65	7035.13	11.60	4.021	2.48	7.51	176.2
MW-2	21-Feb-12	29.46	7064.65	7035.19	NM	NM	NM	NM	NM
MW-2	24-May-12	29.47	7064.65	7035.18	NM	NM	NM	NM	NM
MW-2	10-Sep-12	29.84	7064.65	7034.81	NM	NM	NM	NM	NM
MW-2	04-Dec-12	30.03	7064.65	7034.62	NM	NM	NM	NM	NM

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MW-2	26-Mar-13	29.60	7064.65	7035.05	NM	NM	NM	NM	NM
MW-2	27-Jun-13	30.11	7064.65	7034.54	NM	NM	NM	NM	NM
MW-3	05-Mar-09	27.16	7064.01	7036.85	12.29	4.310	2.17	6.66	-28.2
MW-3	11-Sep-09	27.99	7064.01	7036.02	13.50	6.080	0.53	9.43	-163.6
MW-3	15-Jan-10	28.22	7064.01	7035.79	11.99	3.607	1.85	7.27	-222.5
MW-3	14-Oct-10	28.54	7064.01	7035.47	12.41	4.180	1.46	7.24	-53.1
MW-3	21-Jan-11	28.60	7064.01	7035.41	11.92	4.224	1.60	7.20	-122.5
MW-3	12-May-11	28.21	7064.01	7035.80	12.56	4.172	2.25	7.28	-145.8
MW-3	12-Aug-11	29.02	7064.01	7034.99	13.32	4.372	2.35	7.17	-158.5
MW-3	16-Nov-11	29.14	7064.01	7034.87	10.87	4.326	2.17	6.53	-105.7
MW-3	21-Feb-12	29.07	7064.01	7034.94	11.36	4.481	1.01	7.09	-118.0
MW-3	24-May-12	29.09	7064.01	7034.92	13.30	4.325	0.81	7.07	-70.3
MW-3	10-Sep-12	29.45	7064.01	7034.56	13.26	4.377	2.49	7.23	-42.7
MW-3	04-Dec-12	29.65	7064.01	7034.36	12.08	4.294	0.69	7.26	-46.8
MW-3	26-Mar-13	29.12	7064.01	7034.89	11.93	2.337	5.85	7.46	59.3
MW-3	01-Jul-13	29.74	7064.01	7034.27	14.64	4.119	5.43	7.69	-36.8
MW-4	05-Mar-09	27.39	7063.72	7036.33	12.36	4.760	1.72	6.58	-29.2
MW-4	06-Apr-09	27.58	7063.72	7036.14	11.87	4.599	2.06	6.75	18.0
MW-4	10-Sep-09	28.12	7063.72	7035.60	13.09	6.337	0.81	6.98	54.6
MW-4	15-Jan-10	28.34	7063.72	7035.38	11.65	3.812	2.78	7.20	-125.1
MW-4	15-Oct-10	28.64	7063.72	7035.08	12.52	4.491	1.42	7.13	42.8
MW-4	21-Jan-11	28.72	7063.72	7035.00	11.90	4.748	1.14	7.19	5.4
MW-4	12-May-11	28.39	7063.72	7035.33	13.11	4.576	2.58	7.29	-25.8
MW-4	12-Aug-11	29.10	7063.72	7034.62	13.89	4.759	3.98	6.85	74.9
MW-4	16-Nov-11	29.26	7063.72	7034.46	11.66	4.725	2.15	7.11	153.0

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MW-4	21-Feb-12	29.22	7063.72	7034.50	10.27	4.927	1.02	7.02	-11.3
MW-4	24-May-12	29.23	7063.72	7034.49	13.75	4.687	1.04	6.98	39.3
MW-4	10-Sep-12	29.58	7063.72	7034.14	NM	NM	NM	NM	NM
MW-4	04-Dec-12	29.77	7063.72	7033.95	NM	NM	NM	NM	NM
MW-4	26-Mar-13	29.33	7063.72	7034.39	NM	NM	NM	NM	NM
MW-4	27-Jun-13	29.85	7063.72	7033.87	NM	NM	NM	NM	NM
MW-5	05-Mar-09	28.24	7064.79	7036.55	11.80	6.088	3.89	6.61	-17.3
MW-5	10-Sep-09	28.87	7064.79	7035.92	12.78	7.785	1.22	7.09	60.5
MW-5	15-Jan-10	29.10	7064.79	7035.69	11.19	4.288	1.93	7.27	-85.8
MW-5	14-Oct-10	29.38	7064.79	7035.41	12.34	4.725	1.24	7.23	98.1
MW-5	21-Jan-11	29.47	7064.79	7035.32	11.93	5.038	2.71	7.31	103.9
MW-5	12-May-11	29.17	7064.79	7035.62	12.40	4.957	2.44	7.42	-44.4
MW-5	12-Aug-11	29.84	7064.79	7034.95	13.73	4.968	3.87	6.83	189.8
MW-5	16-Nov-11	30.00	7064.79	7034.79	11.16	4.814	4.47	7.18	290.4
MW-5	21-Feb-12	29.96	7064.79	7034.83	NM	NM	NM	NM	NM
MW-5	25-May-12	29.96	7064.79	7034.83	NM	NM	NM	NM	NM
MW-5	10-Sep-12	30.31	7064.79	7034.48	NM	NM	NM	NM	NM
MW-5	04-Dec-12	30.52	7064.79	7034.27	NM	NM	NM	NM	NM
MW-5	26-Mar-13	30.14	7064.79	7034.65	NM	NM	NM	NM	NM
MW-5	27-Jun-13	30.60	7064.79	7034.19	NM	NM	NM	NM	NM
MW-6	05-Mar-09	12.67	7049.54	7036.87	9.21	4.967	4.30	6.53	4.6
MW-6	10-Sep-09	13.90	7049.54	7035.64	11.85	6.287	1.15	7.12	75.9
MW-6	15-Jan-10	14.02	7049.54	7035.52	10.81	3.789	2.46	7.35	-66.7
MW-6	15-Oct-10	14.39	7049.54	7035.15	12.45	4.353	1.40	7.24	20.7
MW-6	21-Jan-11	14.42	7049.54	7035.12	11.59	4.516	3.10	7.32	-37.3

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MW-6	12-May-11	14.00	7049.54	7035.54	10.69	4.349	1.89	7.47	-24.9
MW-6	12-Aug-11	14.93	7049.54	7034.61	11.99	4.492	4.24	7.56	0.2
MW-6	16-Nov-11	14.99	7049.54	7034.55	12.01	4.398	2.74	6.46	182.1
MW-6	21-Feb-12	14.90	7049.54	7034.64	NM	NM	NM	NM	NM
MW-6	25-May-12	14.92	7049.54	7034.62	NM	NM	NM	NM	NM
MW-6	10-Sep-12	NM	7049.54	NM	NM - Well is Dry				
MW-6	04-Dec-12	15.48	7049.54	7034.06	NM	NM	NM	NM	NM
MW-6	26-Mar-13	14.79	7049.54	7034.75	NM	NM	NM	NM	NM
MW-6	27-Jun-13	15.60	7049.54	7033.94	NM	NM	NM	NM	NM
MW-7	06-Mar-09	26.34	7062.80	7036.46	11.40	4.951	2.17	6.50	-3.3
MW-7	10-Sep-09	27.23	7062.80	7035.57	12.61	6.288	1.03	7.05	51.0
MW-7	15-Jan-10	27.44	7062.80	7035.36	11.02	3.820	2.92	7.27	-66.3
MW-7	14-Oct-10	27.76	7062.80	7035.04	12.79	4.047	1.24	7.19	68.6
MW-7	21-Jan-11	27.82	7062.80	7034.98	10.79	4.205	2.22	7.37	42.0
MW-7	12-May-11	27.46	7062.80	7035.34	12.80	4.118	1.73	7.38	-70.4
MW-7	12-Aug-11	28.24	7062.80	7034.56	13.88	4.119	2.90	7.30	112.8
MW-7	16-Nov-11	28.38	7062.80	7034.42	11.24	4.077	2.75	6.32	168.0
MW-7	21-Feb-12	28.31	7062.80	7034.49	NM	NM	NM	NM	NM
MW-7	24-May-12	28.34	7062.80	7034.46	NM	NM	NM	NM	NM
MW-7	10-Sep-12	28.69	7062.80	7034.11	NM	NM	NM	NM	NM
MW-7	04-Dec-12	28.86	7062.80	7033.94	NM	NM	NM	NM	NM
MW-7	26-Mar-13	28.33	7062.80	7034.47	NM	NM	NM	NM	NM
MW-7	27-Jun-13	28.97	7062.80	7033.83	NM	NM	NM	NM	NM
MW-8	06-Mar-09	27.49	7063.27	7035.78	11.91	4.731	2.14	6.40	-4.4
MW-8	10-Sep-09	28.14	7063.27	7035.13	13.53	5.987	1.12	8.51	-93.2

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MW-8	15-Jan-10	28.39	7063.27	7034.88	11.43	2.891	1.86	6.68	-162.2
MW-8	15-Oct-10	28.70	7063.27	7034.57	12.80	4.017	1.21	7.04	-39.1
MW-8	21-Jan-11	28.80	7063.27	7034.47	12.30	4.002	1.55	7.08	-91.2
MW-8	12-May-11	28.52	7063.27	7034.75	13.16	3.966	1.60	7.16	-121.2
MW-8	12-Aug-11	29.19	7063.27	7034.08	13.85	4.194	3.45	6.97	-148.3
MW-8	16-Nov-11	29.35	7063.27	7033.92	11.49	4.218	2.57	6.49	-115.4
MW-8	21-Feb-12	29.31	7063.27	7033.96	12.21	4.500	0.88	6.96	-116.0
MW-8	24-May-12	29.34	7063.27	7033.93	13.43	4.402	0.65	6.93	-41.2
MW-8	10-Sep-12	29.68	7063.27	7033.59	12.98	4.499	1.34	7.12	-27.3
MW-8	04-Dec-12	29.87	7063.27	7033.40	12.53	3.045	3.78	7.13	-3.1
MW-8	26-Mar-13	29.47	7063.27	7033.80	12.65	4.449	4.10	6.95	22.0
MW-8	27-Jun-13	29.97	7063.27	7033.30	14.39	6.908	4.70	7.01	-43.6
MW-9	06-Mar-09	27.60	7062.60	7035.00	9.47	5.418	5.12	6.39	-1.8
MW-9	06-Apr-09	27.74	7062.60	7034.86	11.86	5.174	2.24	6.72	25.2
MW-9	10-Sep-09	28.19	7062.60	7034.41	13.10	7.257	0.86	7.03	-129.8
MW-9	15-Jan-10	28.42	7062.60	7034.18	10.89	3.960	2.29	7.13	-187.4
MW-9	15-Oct-10	28.74	7062.60	7033.86	12.85	4.561	1.89	7.17	-74.4
MW-9	21-Jan-11	28.85	7062.60	7033.75	12.67	4.452	1.34	7.16	-90.8
MW-9	12-May-11	28.61	7062.60	7033.99	13.12	4.120	2.31	7.28	-94.1
MW-9	12-Aug-11	29.22	7062.60	7033.38	12.92	4.492	5.42	7.33	-132.7
MW-9	16-Nov-11	29.41	7062.60	7033.19	11.80	4.402	2.67	5.56	-75.1
MW-9	21-Feb-12	29.39	7062.60	7033.21	11.89	4.241	1.37	6.95	-127.0
MW-9	24-May-12	29.39	7062.60	7033.21	13.68	4.470	0.80	7.08	-56.4
MW-9	10-Sep-12	29.73	7062.60	7032.87	13.41	4.439	1.41	7.13	-52.2
MW-9	04-Dec-12	29.90	7062.60	7032.70	12.87	4.374	1.34	7.19	-60.5
MW-9	26-Mar-13	29.56	7062.60	7033.04	12.57	4.396	1.24	6.72	-15.8

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	pH	ORP (mV)
MW-9	27-Jun-13	30.00	7062.60	7032.60	20.04	6.761	2.38	7.10	-48.5
MW-10	09-Mar-09	26.25	7063.27	7037.02	10.51	4.572	3.44	6.62	15.6
MW-10	10-Sep-09	27.10	7063.27	7036.17	12.62	5.133	1.83	6.97	80.7
MW-10	15-Jan-10	27.29	7063.27	7035.98	10.82	3.210	2.47	7.10	-99.3
MW-10	14-Oct-10	27.61	7063.27	7035.66	11.98	3.811	1.80	7.22	119.2
MW-10	21-Jan-11	27.66	7063.27	7035.61	10.73	3.946	1.78	7.45	90.1
MW-10	12-May-11	27.28	7063.27	7035.99	12.26	3.839	1.34	7.26	84.9
MW-10	12-Aug-11	28.08	7063.27	7035.19	12.84	3.948	4.99	6.62	175.8
MW-10	16-Nov-11	28.20	7063.27	7035.07	10.81	3.912	2.81	6.17	190.7
MW-10	21-Feb-12	28.13	7063.27	7035.14	NM	NM	NM	NM	NM
MW-10	24-May-12	28.15	7063.27	7035.12	NM	NM	NM	NM	NM
MW-10	10-Sep-12	28.54	7063.27	7034.73	NM	NM	NM	NM	NM
MW-10	04-Dec-12	28.72	7063.27	7034.55	NM	NM	NM	NM	NM
MW-10	26-Mar-13	28.20	7063.27	7035.07	NM	NM	NM	NM	NM
MW-10	27-Jun-13	28.79	7063.27	7034.48	NM	NM	NM	NM	NM
MW-11	09-Mar-09	28.33	7064.10	7035.77	11.47	5.730	3.52	6.63	17.1
MW-11	10-Sep-09	28.88	7064.10	7035.22	13.32	7.785	0.67	7.02	61.2
MW-11	15-Jan-10	29.13	7064.10	7034.97	10.20	3.995	1.86	7.16	-59.2
MW-11	14-Oct-10	29.44	7064.10	7034.66	13.00	4.901	1.93	7.20	94.5
MW-11	21-Jan-11	29.53	7064.10	7034.57	11.55	4.937	1.75	7.37	216.0
MW-11	12-May-11	29.25	7064.10	7034.85	12.97	4.701	2.71	7.41	-16.0
MW-11	12-Aug-11	29.89	7064.10	7034.21	12.89	4.872	3.24	7.39	122.2
MW-11	16-Nov-11	30.07	7064.10	7034.03	11.49	4.762	3.61	7.00	307.9
MW-11	21-Feb-12	30.04	7064.10	7034.06	NM	NM	NM	NM	NM
MW-11	24-May-12	30.06	7064.10	7034.04	NM	NM	NM	NM	NM

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Depth to Water (ft)	Surveyed TOC (ft)	GW Elev. (ft)	Temperature (C)	Conductivity (mS)	DO (mg/L)	pH	ORP (mV)
MW-11	10-Sep-12	30.38	7064.10	7033.72	NM	NM	NM	NM	NM
MW-11	04-Dec-12	30.58	7064.10	7033.52	NM	NM	NM	NM	NM
MW-11	26-Mar-13	30.23	7064.10	7033.87	NM	NM	NM	NM	NM
MW-11	27-Jun-13	30.66	7064.10	7033.44	NM	NM	NM	NM	NM
Downgradient MW-7*	09-Mar-09	13.09	7051.30	7038.21	8.14	3.441	4.52	6.49	12.8

NOTE: NM = NOT MEASURED

NA = NOT AVAILABLE

* = Monitoring Well from HWY 537 '06-'07 spill

Average GW Elev.:

7033.88

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)
Analytical Method		8021B	8021B	8021B	8021B	8015B	8015B	8015B
New Mexico WQCC		10	750	750	620	NE	NE	NE
MW-1	05-Mar-09	310	91	5.1	200	2.1	<1.0	<5.0
MW-1	11-Sep-09	1,500	1.1	48	170	4.8	<1.0	<5.0
MW-1	15-Jan-10	630	<5.0	19	47	2.1	<1.0	<5.0
MW-1	15-Oct-10	960	53	37	94	4.1	<1.0	<5.0
MW-1	21-Jan-11	3,600	<10	140	160	10	<1.0	<5.0
MW-1	12-May-11	7,800	42	270	33	19	<1.0	<5.0
MW-1	12-Aug-11	280	<1.0	18	<2.0	1.2	<1.0	<5.0
MW-1	16-Nov-11	2,700	<5.0	76	<10	3.9	<1.0	<5.0
MW-1	21-Feb-12	360	<1.0	54	<2.0	1.2	<1.0	<5.0
MW-1	24-May-12	210	2.1	31	5.1	0.59	<1.0	<5.0
MW-1	10-Sep-12	54	<2.0	36	<4.0	0.45	<1.0	<5.0
MW-1	04-Dec-12	<2.0	<2.0	17	<4.0	0.19	<1.0	<5.0
MW-1	26-Mar-13	1.2	<1.0	1.8	<2.0	<0.050	<1.0	<5.0
MW-1	01-Jul-13	1.6	<1.0	6.5	<2.0	0.090	<1.0	<5.0
MW-2	05-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	05-Mar-09	400	1,100	110	1,300	8.2	3.4	<5.0
MW-3	11-Sep-09	380	27	26	61	4.2	9.6	6.0
MW-3	15-Jan-10	750	11	34	<20	3.4	7.0	6.1
MW-3	14-Oct-10	140	<1.0	6.8	2.8	0.76	1.9	<5.0
MW-3	21-Jan-11	280	<1.0	24	9.1	1.7	3.5	<5.0
MW-3	12-May-11	980	<1.0	42	<2.0	3.0	4.8	<5.0
MW-3	12-Aug-11	51	<1.0	4.2	<2.0	0.38	<1.0	<5.0
MW-3	16-Nov-11	63	<1.0	6.0	<2.0	0.46	3.3	<5.0
MW-3	21-Feb-12	4.8	<1.0	<1.0	<2.0	0.18	<1.0	<5.0
MW-3	24-May-12	50	<1.0	3.0	<2.0	0.33	<1.0	<5.0
MW-3	10-Sep-12	6.2	<2.0	<2.0	<4.0	0.29	<1.0	<5.0
MW-3	04-Dec-12	<2.0	<2.0	<2.0	<4.0	0.26	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)
Analytical Method		8021B	8021B	8021B	8021B	8015B	8015B	8015B
New Mexico WQCC		10	750	750	620	NE	NE	NE
MW-3	26-Mar-13	2.5	<1.0	<1.0	<2.0	0.23	<1.0	<5.0
MW-3	01-Jul-13	<1.0	<1.0	<1.0	<2.0	0.11	<1.0	<5.0
MW-4	05-Mar-09	2.7	1.4	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	06-Apr-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	10-Sep-09	13	<1.0	<1.0	<2.0	0.051	<1.0	<5.0
MW-4	15-Jan-10	8.6	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	15-Oct-10	6.3	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	21-Jan-11	3.6	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	21-Feb-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	24-May-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	05-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	06-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	15-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	06-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)
Analytical Method		8021B	8021B	8021B	8021B	8015B	8015B	8015B
New Mexico WQCC		10	750	750	620	NE	NE	NE
MW-7	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	06-Mar-09	160	170	12	350	2.1	1.5	<5.0
MW-8	11-Sep-09	1,200	<20	36	75	4.1	1.1	<5.0
MW-8	15-Jan-10	56	<1.0	2.3	2.2	0.24	<1.0	<5.0
MW-8	15-Oct-10	50	<1.0	1.7	<2.0	0.21	<1.0	<5.0
MW-8	21-Jan-11	370	<1.0	4.6	<2.0	0.58	<1.0	<5.0
MW-8	12-May-11	430	<1.0	25	<2.0	1.4	<1.0	<5.0
MW-8	12-Aug-11	2.3	<1.0	<1.0	<2.0	0.070	<1.0	<5.0
MW-8	16-Nov-11	1.5	<1.0	<1.0	<2.0	0.17	<1.0	<5.0
MW-8	21-Feb-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-8	24-May-12	<1.0	<1.0	<1.0	<2.0	0.12	<1.0	<5.0
MW-8	10-Sep-12	<1.0	<1.0	<1.0	<2.0	0.16	<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	27-Jun-13	<1.0	<1.0	<1.0	<2.0	0.052	<1.0	<5.0
MW-9	06-Mar-09	170	350	49	530	2.5	<1.0	<5.0
MW-9	06-Apr-09	82	62	16	210	1.6	<1.0	<5.0
MW-9	10-Sep-09	46	<1.0	3.8	19	0.86	<1.0	<5.0
MW-9	15-Jan-10	62	<1.0	4.2	12	0.49	<1.0	<5.0
MW-9	15-Oct-10	53	<1.0	2.3	<2.0	0.22	<1.0	<5.0
MW-9	21-Jan-11	390	<1.0	5.1	<2.0	0.41	<1.0	<5.0
MW-9	12-May-11	390	<1.0	11	<2.0	0.92	<1.0	<5.0
MW-9	12-Aug-11	120	<1.0	5.6	<2.0	0.35	<1.0	<5.0
MW-9	16-Nov-11	200	<5.0	9.6	<10	0.57	<1.0	<5.0
MW-9	21-Feb-12	120	<1.0	4.2	<2.0	0.30	<1.0	<5.0
MW-9	24-May-12	3.8	<1.0	1.4	<2.0	0.076	<1.0	<5.0
MW-9	10-Sep-12	<1.0	<1.0	<1.0	<2.0	0.072	<1.0	<5.0
MW-9	04-Dec-12	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-9	26-Mar-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-9	27-Jun-13	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
BMG HWY 537 TRUCK RECEIVING STATION 2009 RELEASE
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl- benzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)
Analytical Method		8021B	8021B	8021B	8021B	8015B	8015B	8015B
New Mexico WQCC		10	750	750	620	NE	NE	NE
MW-10	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-10	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	10-Sep-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	15-Jan-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	14-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	21-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	12-May-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	12-Aug-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-11	16-Nov-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
Downgradient MW-7*	09-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0

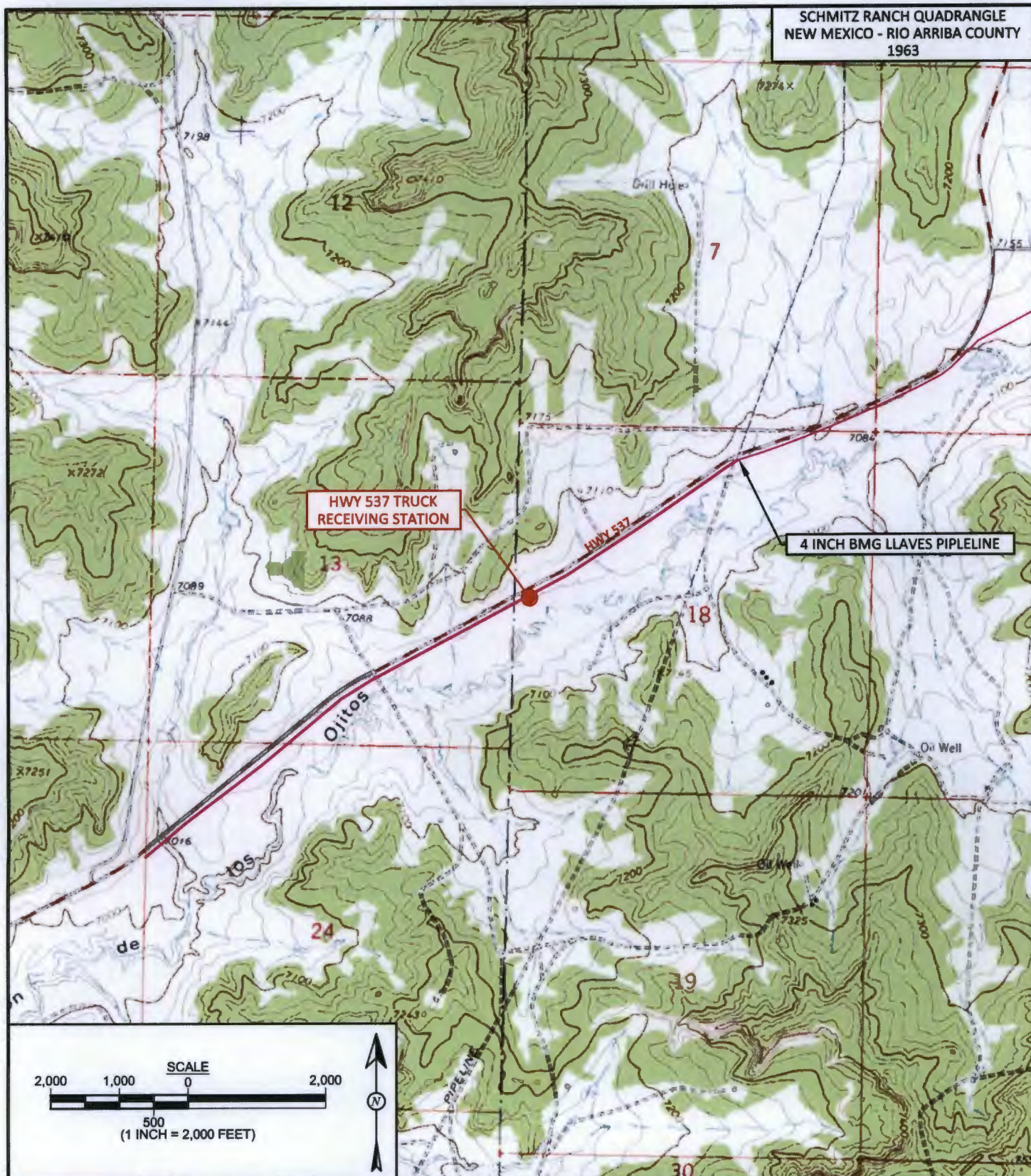
NOTE: NS = Not Sampled

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil Range Organics

* = Monitoring Well from HWY 537 '06-'07 spill



Animas Environmental Services, LLC

DRAWN BY:
C. Lameman

DATE DRAWN:
January 10, 2013

REVISIONS BY:
C. Lameman

DATE REVISED:
August 9, 2013

CHECKED BY:
D. Watson

DATE CHECKED:
August 9, 2013

APPROVED BY:
E. McNally

DATE APPROVED:
August 9, 2013

FIGURE 1

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

FIGURE 2

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



Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	January 10, 2013
REVISIONS BY:	DATE REVISED:
C. Lameman	August 9, 2013
CHECKED BY:	DATE CHECKED:
D. Watson	August 9, 2013
APPROVED BY:	DATE APPROVED:
E. McNally	August 9, 2013

LEGEND

● MONITORING WELL INSTALLED
FEBRUARY 2009

AERIAL SOURCE: © 2012 MICROSOFT CORPORATION - AVAILABLE EXCLUSIVELY BY DIGITALGLOBE

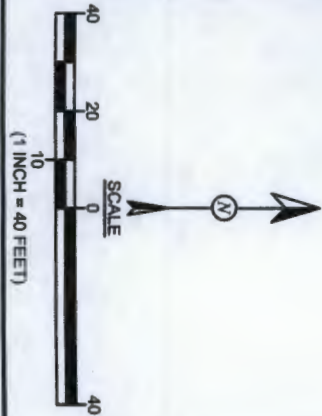


FIGURE 3

**GROUNDWATER ELEVATION
CONTOURS, JUNE AND JULY 2013**
BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW¼, NW¼ SECTION 18, T25N, R3W
RIO ARriba COUNTY, NEW MEXICO
N36.39866, W107.19328



Animas Environmental Services, LLC

DRAWN BY:	DATE DRAWN:
C. Lameman	January 10, 2013
REVISIONS BY:	DATE REVISED:
C. Lameman	August 9, 2013
CHECKED BY:	DATE CHECKED:
D. Watson	August 9, 2013
APPROVED BY:	DATE APPROVED:
E. McNally	August 9, 2013

LEGEND

- MONITOR WELL LOCATIONS
(INSTALLED FEBRUARY 2009)
- FENCE
- PONDS, WET LANDS, & FLOOD
PLANES
- 7034.25
GROUNDWATER ELEVATION
IN FEET (A.M.S.L.)
- 7034.0-
GROUNDWATER ELEVATION
CONTOUR IN FEET (A.M.S.L.)

NOTE: GROUNDWATER ELEVATION
MEASUREMENTS WERE MADE ON JUNE 27 AND
JULY 1, 2013.

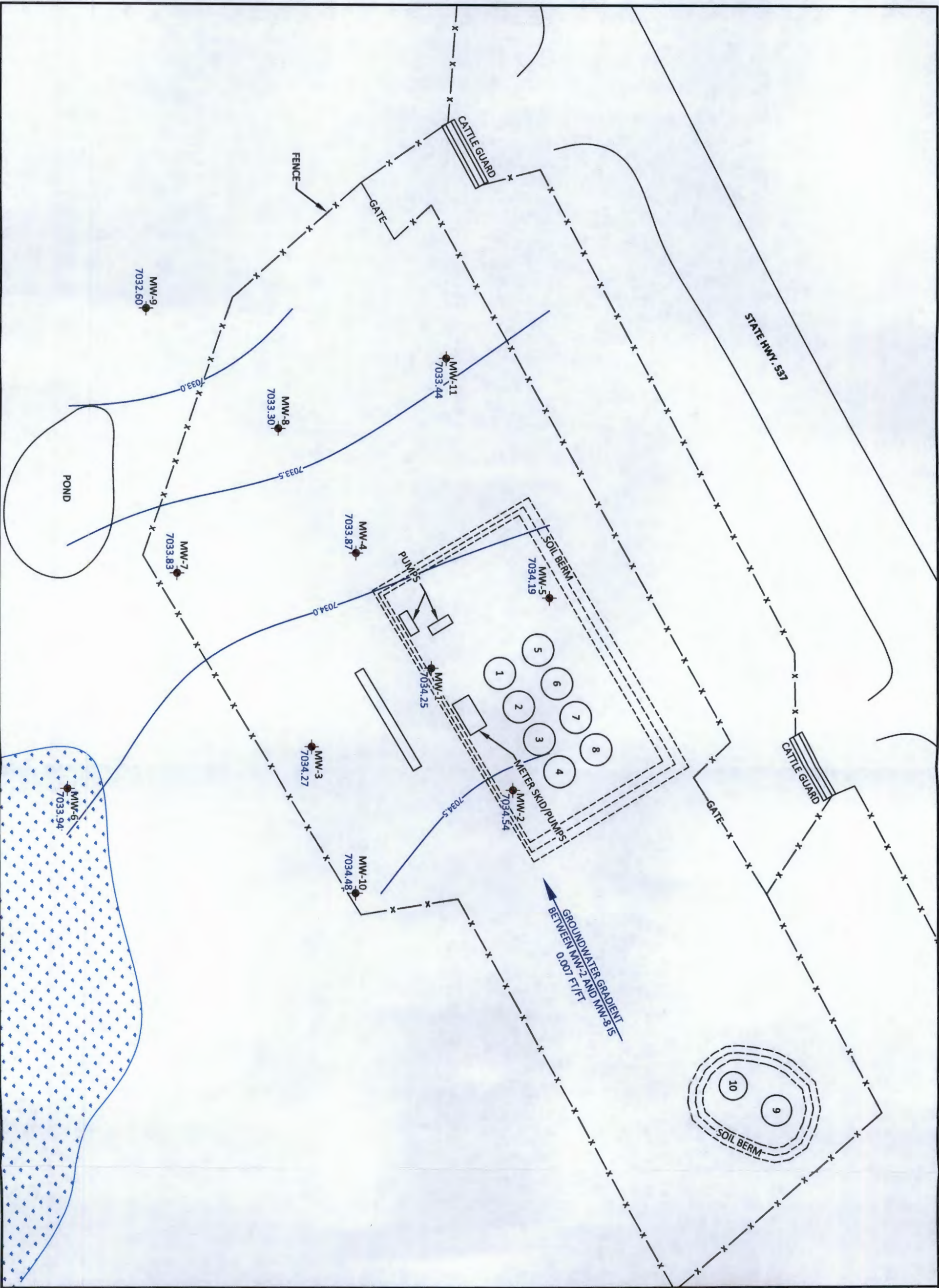
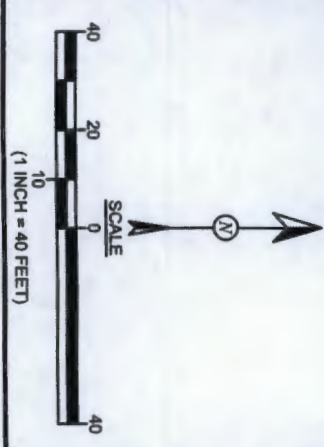


FIGURE 4

GROUNDWATER CONTAMINANT
CONCENTRATIONS, JUNE 2013
BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537
TRUCK RECEIVING STATION 2009 RELEASE
SW¼ NW¼ SECTION 18, T25N, R3W
RIO ARriba COUNTY, NEW MEXICO
N36.39866, W107.19328



Animas Environmental Services, LLC

DRAWN BY:	C. Lameman	DATE DRAWN:	January 10, 2013
REVISIONS BY:	C. Lameman	DATE REVISED:	August 9, 2013
CHECKED BY:	D. Watson	DATE CHECKED:	August 9, 2013
APPROVED BY:	E. McNally	DATE APPROVED:	August 9, 2013

LEGEND

- MONITOR WELL LOCATIONS (INSTALLED FEBRUARY 2009)
- FENCE
- PONDS, WET LANDS, & FLOOD PLACES
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X XYLENES
- GRO GASOLINE RANGED ORGANICS
- DRO DIESEL OIL RANGED ORGANICS
- MRO MOTOR OIL RANGED ORGANICS
- µg/L MICROGRAMS PER LITER (PPB)
- < ANALYTE NOT DETECTED ABOVE LISTED METHOD LIMIT

NOTE: ALL SAMPLES COLLECTED ON JUNE 27 AND JULY 1, 2013, AND ANALYZED PER EPA METHOD 8021B AND 8015B.

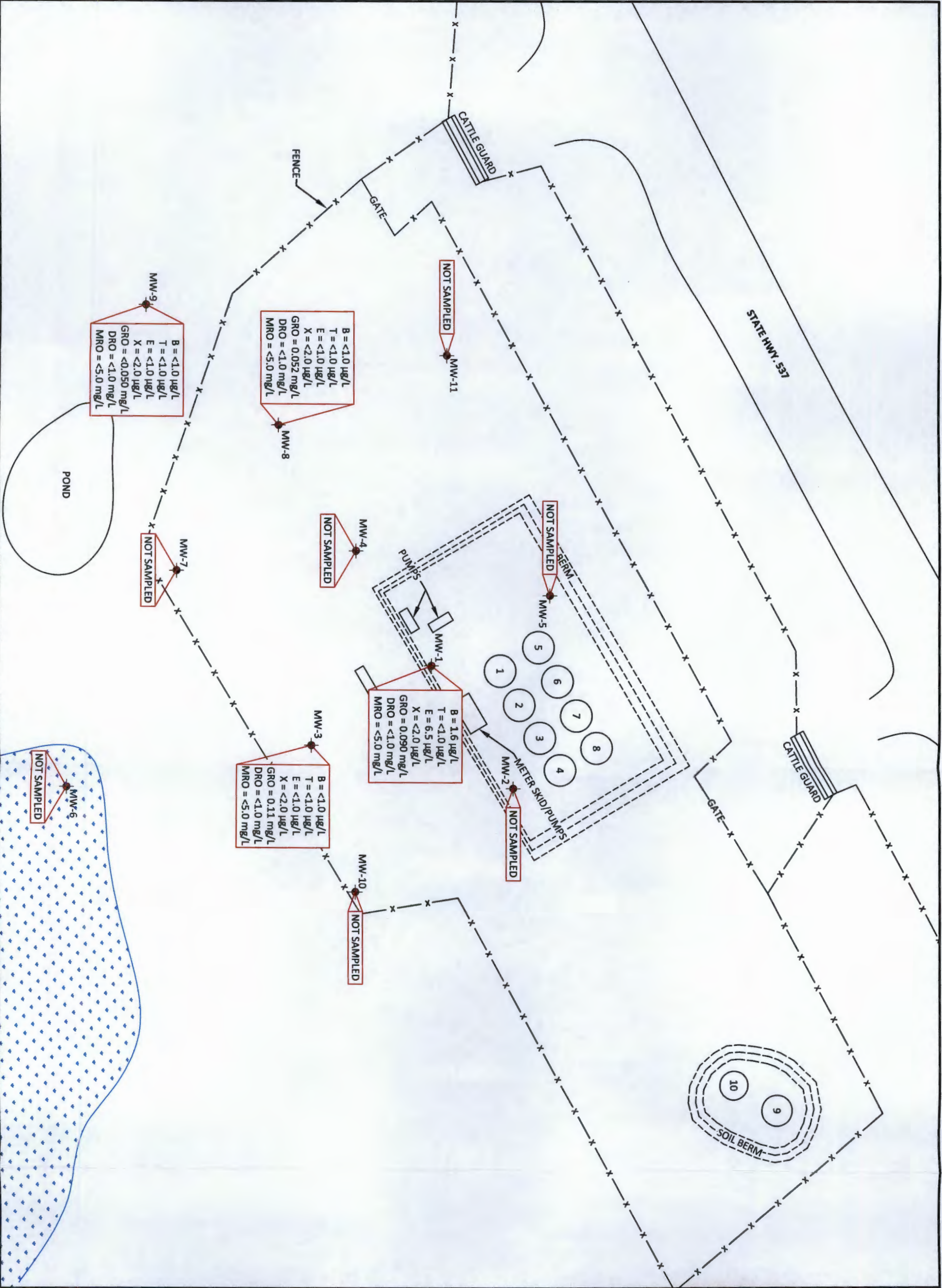
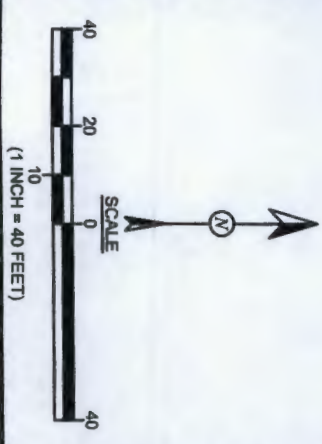


FIGURE 5

DISSOLVED BENZENE
CONCENTRATION CONTOURS

JUNE 2013

BENSON-MONTIN-GREER
LLAVES PIPELINE HWY. 537

TRUCK RECEIVING STATION 2009 RELEASE
SW $\frac{1}{4}$ NW $\frac{1}{4}$ SECTION 18, T25N, R3W
RIO ARriba COUNTY, NEW MEXICO
N36.39866, W107.19328



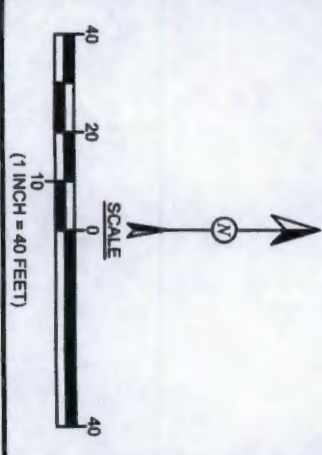
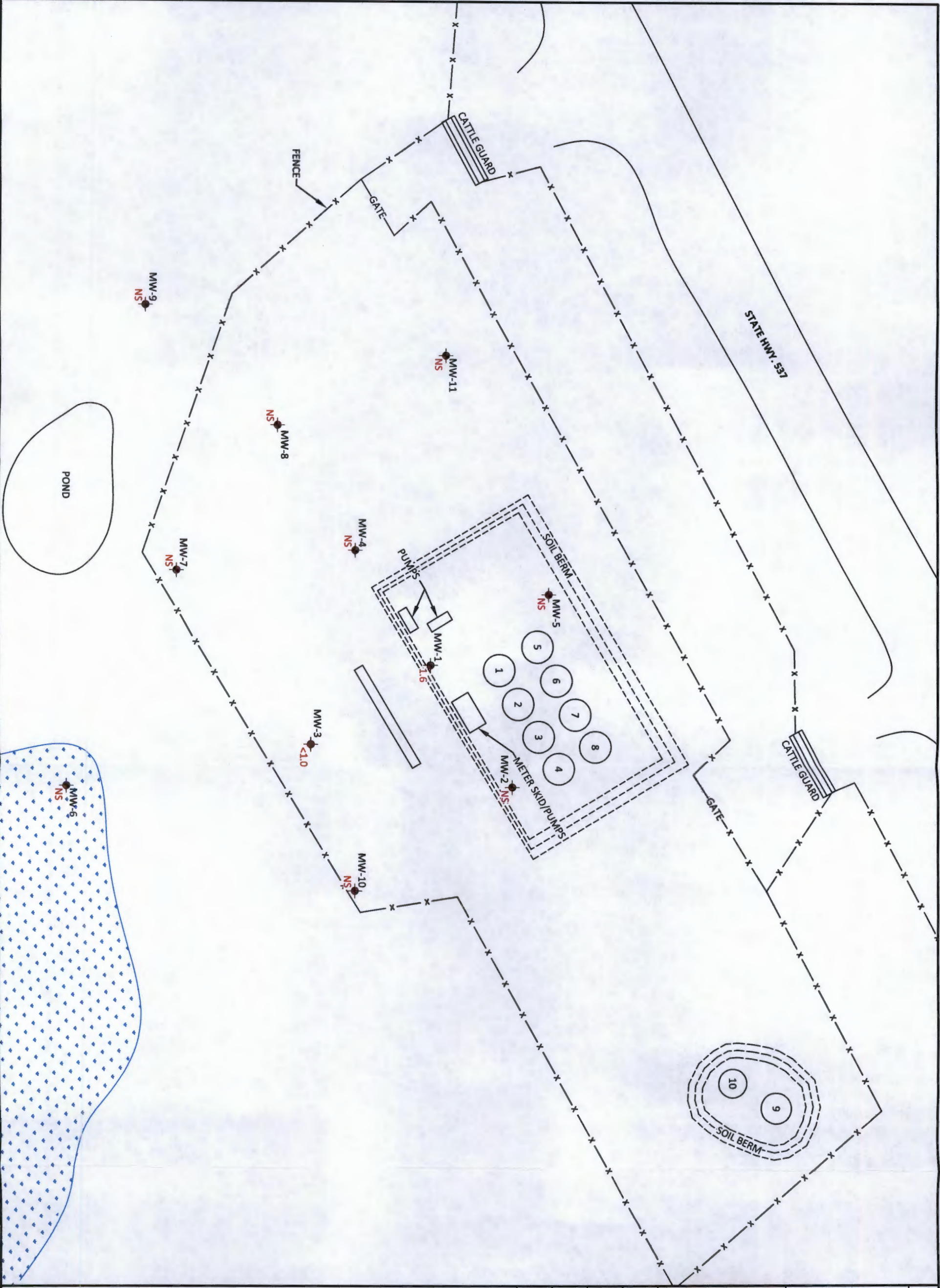
Animas Environmental Services, LLC

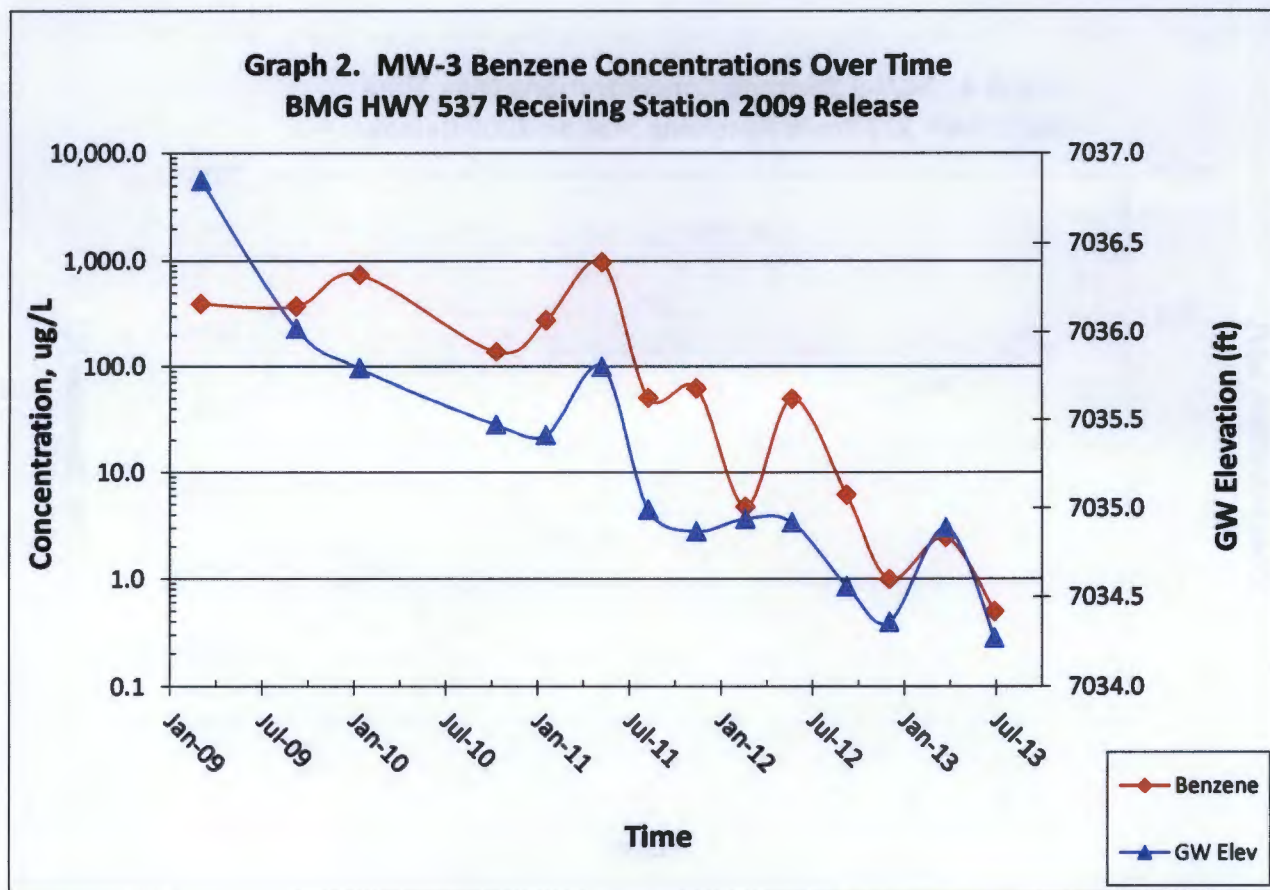
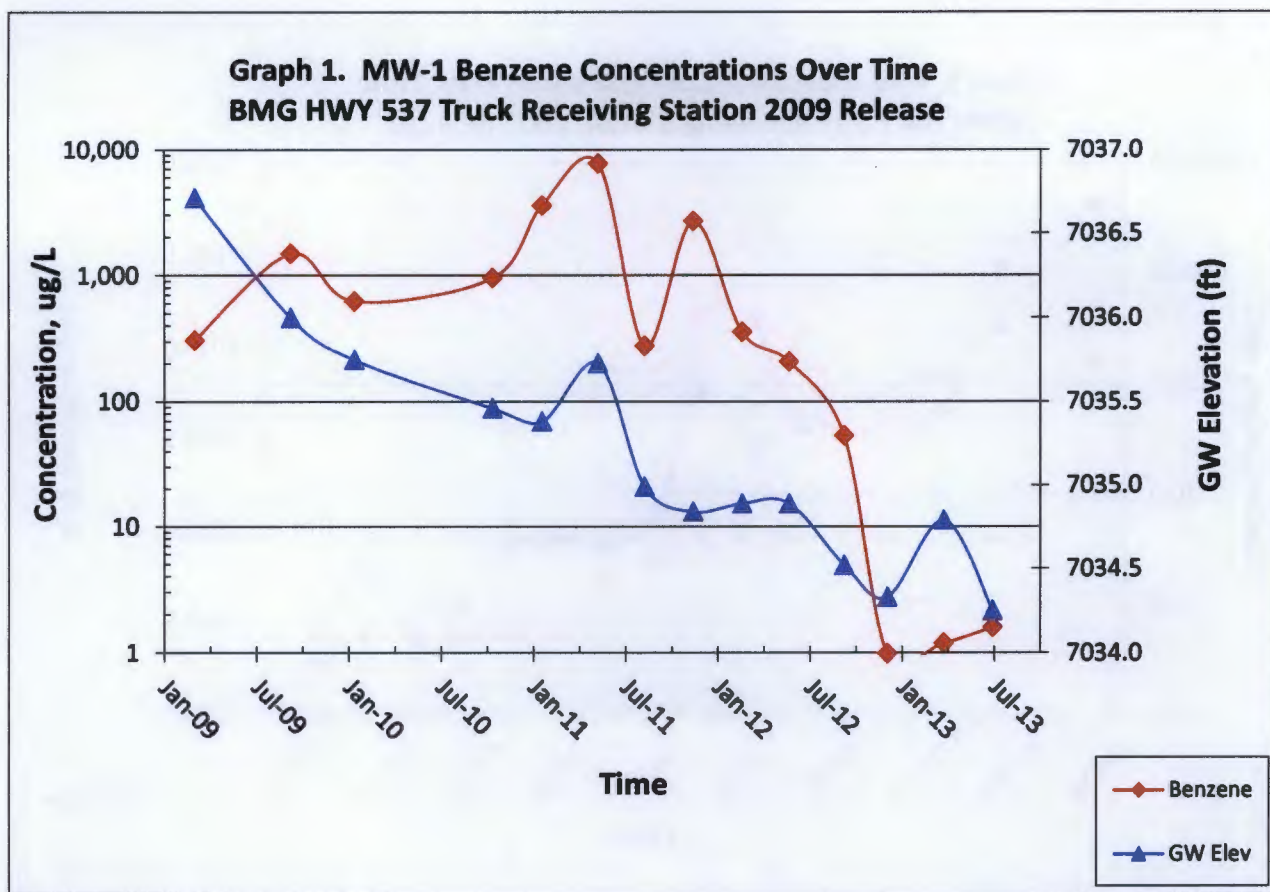
DRAWN BY:	C. Lameman	DATE DRAWN:	January 10, 2013
REVISIONS BY:	C. Lameman	DATE REVISED:	August 9, 2013
CHECKED BY:	D. Watson	DATE CHECKED:	August 9, 2013
APPROVED BY:	E. McNally	DATE APPROVED:	August 9, 2013

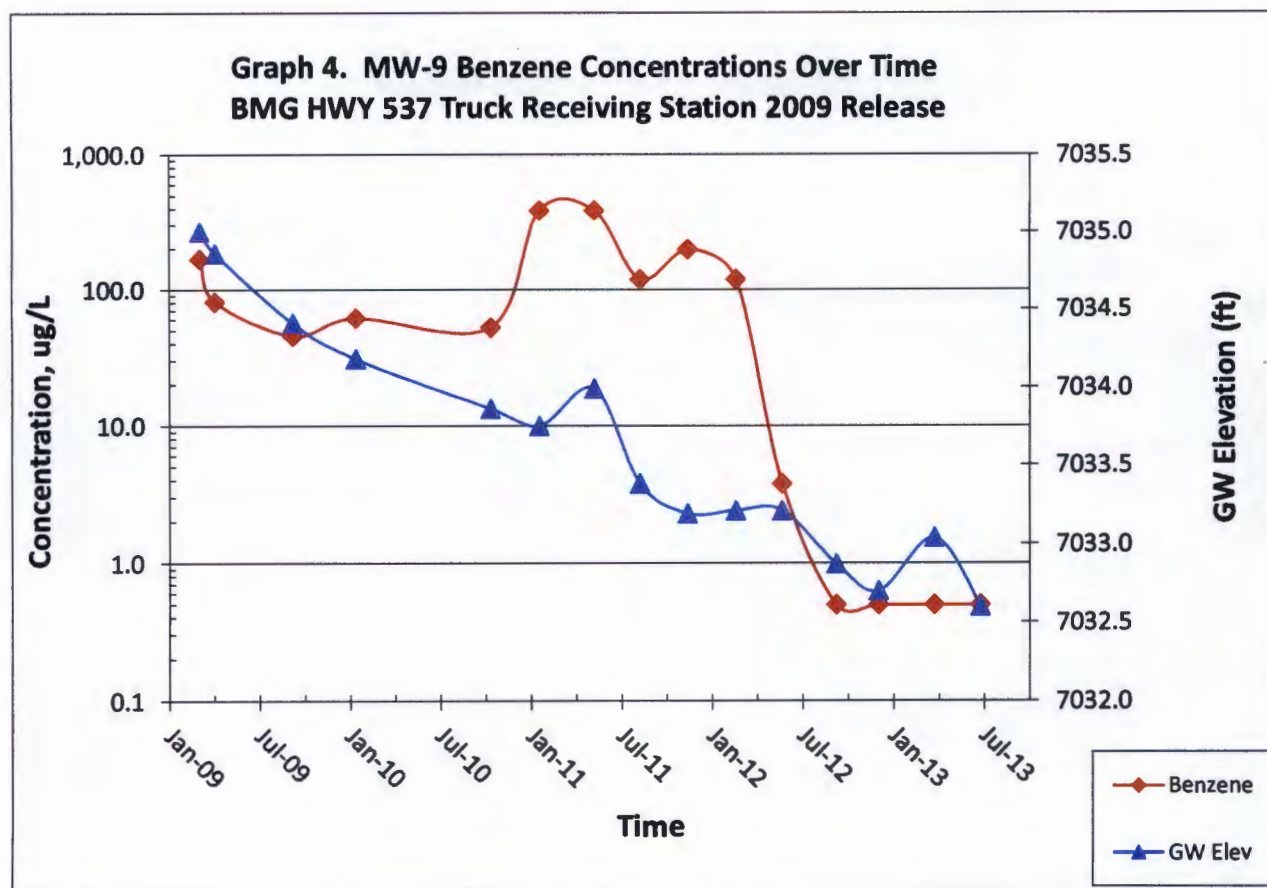
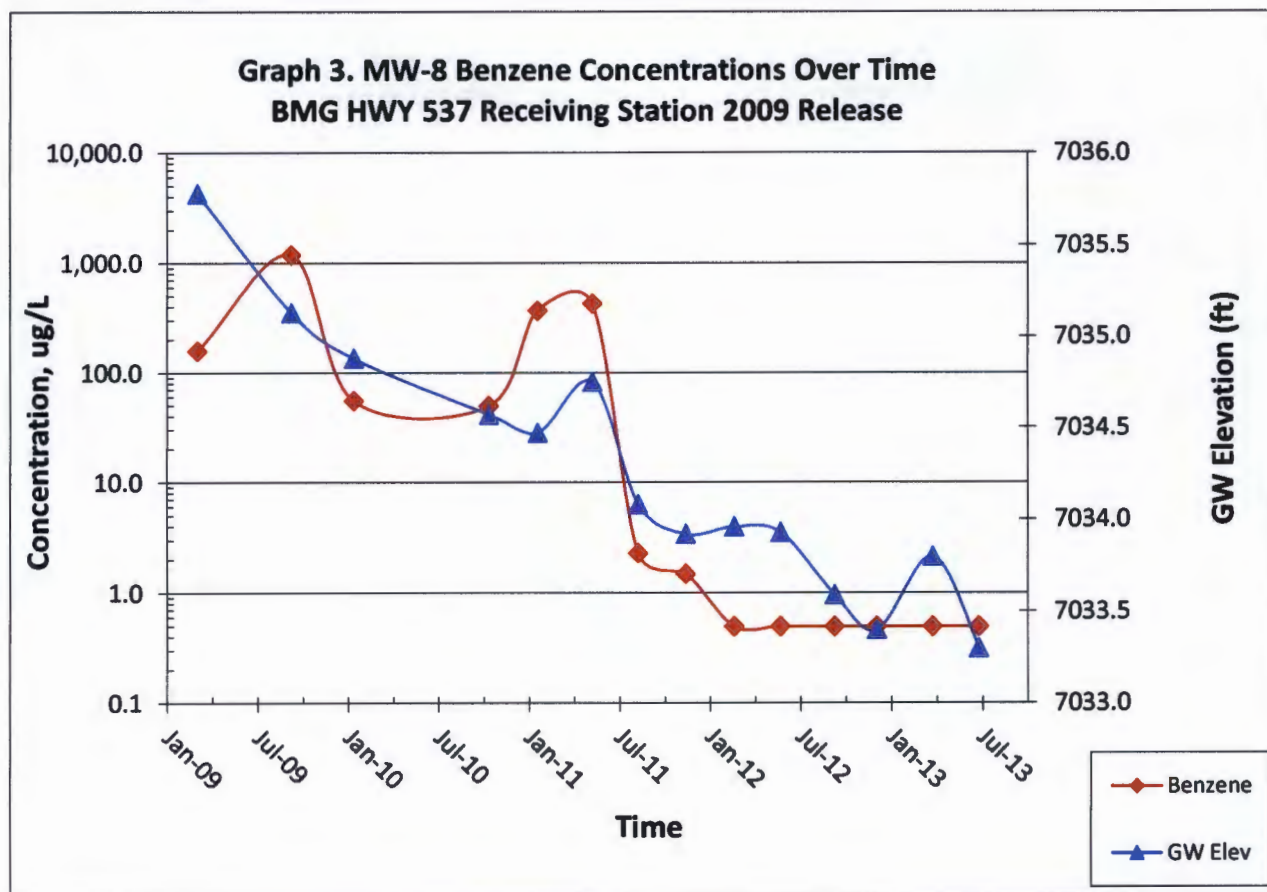
LEGEND

- MONITOR WELL LOCATIONS
(INSTALLED FEBRUARY 2009)
- FENCE
- PONDS, WET LANDS, & FLOOD
PLANES

NOTE: ALL SAMPLES COLLECTED ON JUNE 27
AND JULY 1, 2013, AND ANALYZED PER EPA
METHOD 8021B AND 8015B.







Animas Environmental Services

Project:	Groundwater Monitoring
Site:	Hwy 537 Truck Station Spill 2009
Location:	Rio Arriba County, New Mexico
Tech:	L. Camore

Date: 6/27/2013
Time: 1140
Form: 1 of 1

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

MONITORING WELL SAMPLING RECORD

Monitor Well No: MW-3

Animas Environmental Services

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

Site: Highway 537 Truck Station Spill 2009

Project No.: AES 090201

Location: Rio Arriba County, New Mexico

Date: 16210 7-1-2013

Project: Groundwater Monitoring and Sampling

Arrival Time:

Sampling Technician: *J. Carroll*

Air Temp:

Purge / No Purge: Purge

T.O.C. Elev. (ft): 7064.01

Well Diameter (in): 2

Total Well Depth (ft): 41.1

Initial D.T.W. (ft): 79.74

Time: 1630

(taken at initial gauging of all wells)

Confirm D.T.W. (ft):

Time: 1:42

(taken prior to purging well)

Final D.T.W. (ft): 30.45

Time: 11.510

(taken after sample collection)

If NAPL Present: D.T.P.:

D.T.W.:

Thickness: _____ **Time:** _____

Water Quality Parameters - Recorded During Well Purging

[illegible]**Analytical Parameters (include analysis method and number and type of sample containers)**

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)

TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)

TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)

Disposal of Purged Water: Onto ground

Collected Samples Stored on Ice in Cooler: *YPC*

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: 5.50 gal. prod

Animas Environmental Services

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

Project No.: AES 090201

Date: 6/27-2013

Arrival Time: 1330 (1470 sample)

Air Temp: 97°

T.O.C. Elev. (ft): 7063.27

Total Well Depth (ft): 44.1

Time: 1700 (taken at initial gauging of all wells)

Time: 1335 (taken prior to purging well)

Time: 1421 (taken after sample collection)

D.T.W.: _____ Thickness: _____ Time: _____

[illegible]

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)
Disposal of Purged Water: <u>ont ground</u> Collected Samples Stored on Ice in Cooler: <u>yes</u> Chain of Custody Record Complete: <u>yes</u> Analytical Laboratory: <u>Hall Environmental Analysis Laboratory, Albuquerque, NM</u> Equipment Used During Sampling: <u>Keck Water Level or Keck Interface Level, YSI Water Quality Meter</u> <u>and New Disposable Bailer</u>

[illegible]

Animas Environmental Services

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

Project No.: AES 090201
Date: 6/27/2013
Arrival Time: 1236 (1316 Sample)
Air Temp: 89° F
O.C. Elev. (ft): 7062.6
Well Depth (ft): 39.15
(taken at initial gauging of all wells)
(taken prior to purging well)
(taken after sample collection)
Thickness: Time:

[illegible]

BTEX per EPA Method 8021 (3 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (2 40mL Vials w/ HCl preserve)
TPH C6-C36 per EPA Method 8015B (40mL Vial w/ no preservative)
Disposal of Purged Water: <u>on to ground</u> Collected Samples Stored on Ice in Cooler: <u>yes</u> Chain of Custody Record Complete: <u>yes</u> Analytical Laboratory: <u>Hall Environmental Analysis Laboratory, Albuquerque, NM</u> Equipment Used During Sampling: <u>Keck Water Level or Keck Interface Level, YSI Water Quality Meter</u> <u>and New Disposable Bailer</u>



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

July 05, 2013

Debbie Watson

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: BMG Hwy 537 2009 Release

OrderNo.: 1307017

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/29/2013 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307017

Date Reported: 7/5/2013

CLIENT: Animas Environmental Services

Client Sample ID: MW-9

Project: BMG Hwy 537 2009 Release

Collection Date: 6/27/2013 1:16:00 PM

Lab ID: 1307017-001

Matrix: AQUEOUS

Received Date: 6/29/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/2/2013 1:39:44 PM	8197
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/2/2013 1:39:44 PM	8197
Surr: DNOP	109	75.4-146		%REC	1	7/2/2013 1:39:44 PM	8197
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/2/2013 12:52:52 AM	R11690
Surr: BFB	89.1	51.5-151		%REC	1	7/2/2013 12:52:52 AM	R11690
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/2/2013 12:52:52 AM	R11690
Toluene	ND	1.0		µg/L	1	7/2/2013 12:52:52 AM	R11690
Ethylbenzene	ND	1.0		µg/L	1	7/2/2013 12:52:52 AM	R11690
Xylenes, Total	ND	2.0		µg/L	1	7/2/2013 12:52:52 AM	R11690
Surr: 4-Bromofluorobenzene	111	69.4-129		%REC	1	7/2/2013 12:52:52 AM	R11690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307017

Date Reported: 7/5/2013

CLIENT: Animas Environmental Services

Client Sample ID: MW-8

Project: BMG Hwy 537 2009 Release

Collection Date: 6/27/2013 2:20:00 PM

Lab ID: 1307017-002

Matrix: AQUEOUS

Received Date: 6/29/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: JME
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/2/2013 2:09:50 PM	8197
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/2/2013 2:09:50 PM	8197
Surr: DNOP	99.3	75.4-146		%REC	1	7/2/2013 2:09:50 PM	8197
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.052	0.050		mg/L	1	7/2/2013 1:22:56 AM	R11690
Surr: BFB	100	51.5-151		%REC	1	7/2/2013 1:22:56 AM	R11690
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/2/2013 1:22:56 AM	R11690
Toluene	ND	1.0		µg/L	1	7/2/2013 1:22:56 AM	R11690
Ethylbenzene	ND	1.0		µg/L	1	7/2/2013 1:22:56 AM	R11690
Xylenes, Total	ND	2.0		µg/L	1	7/2/2013 1:22:56 AM	R11690
Surr: 4-Bromofluorobenzene	111	69.4-129		%REC	1	7/2/2013 1:22:56 AM	R11690

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307017

05-Jul-13

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	MB-8197	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range					
Client ID:	PBW	Batch ID:	8197	RunNo:	11699					
Prep Date:	7/2/2013	Analysis Date:	7/2/2013	SeqNo:	332278	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	1.0		1.000		104	75.4	146			

Sample ID	LCS-8197	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range					
Client ID:	LCSW	Batch ID:	8197	RunNo:	11699					
Prep Date:	7/2/2013	Analysis Date:	7/2/2013	SeqNo:	332279	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.0	1.0	5.000	0	121	89.1	151			
Surr: DNOP	0.55		0.5000		110	75.4	146			

Sample ID	LCSD-8197	SampType:	LCSD	TestCode:	EPA Method 8015D: Diesel Range					
Client ID:	LCSS02	Batch ID:	8197	RunNo:	11699					
Prep Date:	7/2/2013	Analysis Date:	7/2/2013	SeqNo:	332280	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.1	1.0	5.000	0	123	89.1	151	1.54	20	
Surr: DNOP	0.55		0.5000		110	75.4	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307017

05-Jul-13

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	B9	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R11690	RunNo:	11690					
Prep Date:		Analysis Date:	7/1/2013	SeqNo:	331761	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	19		20.00		92.8	51.5	151			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R11690	RunNo:	11690					
Prep Date:		Analysis Date:	7/1/2013	SeqNo:	331762	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.50	0.050	0.5000	0	99.1	73.2	124			
Surr: BFB	20		20.00		101	51.5	151			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307017

05-Jul-13

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID B9	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBW	Batch ID: R11690		RunNo: 11690							
Prep Date:	Analysis Date: 7/1/2013		SeqNo: 331778		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	22		20.00		110	69.4	129			

Sample ID 100NG BTEX LCS	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSW	Batch ID: R11690		RunNo: 11690							
Prep Date:	Analysis Date: 7/1/2013		SeqNo: 331779		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	80	120			
Toluene	21	1.0	20.00	0	104	80	120			
Ethylbenzene	21	1.0	20.00	0	104	80	120			
Xylenes, Total	63	2.0	60.00	0	105	80	120			
Surr: 4-Bromofluorobenzene	22		20.00		112	69.4	129			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1307017

RcptNo: 1

Received by/date:

AF

06/29/13

Logged By:

Michelle Garcia

6/29/2013 10:00:00 AM

Michelle Garcia

Completed By:

Michelle Garcia

7/1/2013 10:34:33 AM

Michelle Garcia

Reviewed By:

JO

07/01/13

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☒ No ☐ No VOA Vials ☐
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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)

16. 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:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			



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

July 08, 2013

Debbie Watson

Animas Environmental Services
624 East Comanche
Farmington, NM 87401
TEL: (505) 486-4071
FAX

RE: BMG Hwy 537 2009 Release

OrderNo.: 1307184

Dear Debbie Watson:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/3/2013 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307184

Date Reported: 7/8/2013

CLIENT: Animas Environmental Services

Client Sample ID: MW-1

Project: BMG Hwy 537 2009 Release

Collection Date: 7/1/2013 4:00:00 PM

Lab ID: 1307184-001

Matrix: AQUEOUS

Received Date: 7/3/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: GSA
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/3/2013 6:28:39 PM	8222
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/3/2013 6:28:39 PM	8222
Surr: DNOP	107	75.4-146		%REC	1	7/3/2013 6:28:39 PM	8222
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.090	0.050		mg/L	1	7/3/2013 9:46:44 PM	R11733
Surr: BFB	108	51.5-151		%REC	1	7/3/2013 9:46:44 PM	R11733
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	1.6	1.0		µg/L	1	7/3/2013 9:46:44 PM	R11733
Toluene	ND	1.0		µg/L	1	7/3/2013 9:46:44 PM	R11733
Ethylbenzene	6.5	1.0		µg/L	1	7/3/2013 9:46:44 PM	R11733
Xylenes, Total	ND	2.0		µg/L	1	7/3/2013 9:46:44 PM	R11733
Surr: 4-Bromofluorobenzene	100	69.4-129		%REC	1	7/3/2013 9:46:44 PM	R11733

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307184

Date Reported: 7/8/2013

CLIENT: Animas Environmental Services

Client Sample ID: MW-3

Project: BMG Hwy 537 2009 Release

Collection Date: 7/1/2013 5:01:00 PM

Lab ID: 1307184-002

Matrix: AQUEOUS

Received Date: 7/3/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE							Analyst: GSA
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/3/2013 6:58:48 PM	8222
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/3/2013 6:58:48 PM	8222
Surr: DNOP	112	75.4-146		%REC	1	7/3/2013 6:58:48 PM	8222
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	0.11	0.050		mg/L	1	7/3/2013 10:15:19 PM	R11733
Surr: BFB	109	51.5-151		%REC	1	7/3/2013 10:15:19 PM	R11733
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/3/2013 10:15:19 PM	R11733
Toluene	ND	1.0		µg/L	1	7/3/2013 10:15:19 PM	R11733
Ethylbenzene	ND	1.0		µg/L	1	7/3/2013 10:15:19 PM	R11733
Xylenes, Total	ND	2.0		µg/L	1	7/3/2013 10:15:19 PM	R11733
Surr: 4-Bromofluorobenzene	97.3	69.4-129		%REC	1	7/3/2013 10:15:19 PM	R11733

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307184

Date Reported: 7/8/2013

CLIENT: Animas Environmental Services

Client Sample ID: Trip Blank

Project: BMG Hwy 537 2009 Release

Collection Date:

Lab ID: 1307184-003

Matrix: TRIP BLANK

Received Date: 7/3/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	1.0		µg/L	1	7/3/2013 10:43:54 PM	R11733
Toluene	ND	1.0		µg/L	1	7/3/2013 10:43:54 PM	R11733
Ethylbenzene	ND	1.0		µg/L	1	7/3/2013 10:43:54 PM	R11733
Xylenes, Total	ND	2.0		µg/L	1	7/3/2013 10:43:54 PM	R11733
Surr: 4-Bromofluorobenzene	95.3	69.4-129		%REC	1	7/3/2013 10:43:54 PM	R11733

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307184

08-Jul-13

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	MB-8222	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range					
Client ID:	PBW	Batch ID:	8222	RunNo:	11732					
Prep Date:	7/3/2013	Analysis Date:	7/3/2013	SeqNo:	333310	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	0.95		1.000		95.4	75.4	146			

Sample ID	LCS-8222	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range					
Client ID:	LCSW	Batch ID:	8222	RunNo:	11732					
Prep Date:	7/3/2013	Analysis Date:	7/3/2013	SeqNo:	333311	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.9	1.0	5.000	0	117	89.1	151			
Surr: DNOP	0.50		0.5000		101	75.4	146			

Sample ID	LCSD-8222	SampType:	LCSD	TestCode:	EPA Method 8015D: Diesel Range					
Client ID:	LCSS02	Batch ID:	8222	RunNo:	11732					
Prep Date:	7/3/2013	Analysis Date:	7/3/2013	SeqNo:	333312	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.1	1.0	5.000	0	122	89.1	151	4.16	20	
Surr: DNOP	0.57		0.5000		115	75.4	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307184

08-Jul-13

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBW	Batch ID:	R11733	RunNo:	11733					
Prep Date:		Analysis Date:	7/3/2013	SeqNo:	333590	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	19		20.00		95.0	51.5	151			

Sample ID	2.5UG GRO LCS	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSW	Batch ID:	R11733	RunNo:	11733					
Prep Date:		Analysis Date:	7/3/2013	SeqNo:	333591	Units:	mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	89.2	73.2	124			
Surr: BFB	20		20.00		101	51.5	151			

Qualifiers:

- | | |
|--|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH greater than 2 for VOA and TOC only. |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1307184

08-Jul-13

Client: Animas Environmental Services

Project: BMG Hwy 537 2009 Release

Sample ID	5ML RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBW	Batch ID:	R11733	RunNo:	11733					
Prep Date:		Analysis Date:	7/3/2013	SeqNo:	333612	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		98.7	69.4	129			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSW	Batch ID:	R11733	RunNo:	11733					
Prep Date:		Analysis Date:	7/3/2013	SeqNo:	333613	Units:	µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.8	80	120			
Toluene	20	1.0	20.00	0	97.8	80	120			
Ethylbenzene	20	1.0	20.00	0	97.8	80	120			
Xylenes, Total	59	2.0	60.00	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	21		20.00		103	69.4	129			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87105
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental

Work Order Number: 1307184

RcptNo: 1

Received by/date:	<u>mg</u>	<u>07/03/13</u>
Logged By:	Michelle Garcia	7/3/2013 10:00:00 AM
Completed By:	Michelle Garcia	7/3/2013 11:37:01 AM
Reviewed By:	<u>[Signature]</u>	<u>07/03/2013</u>

Chain of Custody

- | | | | |
|--|---|-----------------------------|---|
| 1. Custody seals intact on sample bottles? | Yes ☐ | No ☐ | Not Present ☒ |
| 2. Is Chain of Custody complete? | Yes ☒ | No ☐ | Not Present ☐ |
| 3. How was the sample delivered? | Courier | | |

Log In

- | | | | |
|---|---|--|---------------------------------------|
| 4. Was an attempt made to cool the samples? | Yes ☒ | No ☐ | NA ☐ |
| 5. Were all samples received at a temperature of >0° C to 6.0°C | Yes ☒ | No ☐ | NA ☐ |
| 6. Sample(s) in proper container(s)? | Yes ☒ | No ☐ | |
| 7. Sufficient sample volume for indicated test(s)? | Yes ☒ | No ☐ | |
| 8. Are samples (except VOA and ONG) properly preserved? | Yes ☒ | No ☐ | |
| 9. Was preservative added to bottles? | Yes ☐ | No ☒ | NA ☐ |
| 10. VOA vials have zero headspace? | Yes ☒ | No ☐ | No VOA Vials ☐ |
| 11. Were any sample containers received broken? | Yes ☐ | No ☒ | |
| 12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) | Yes ☒ | No ☐ | |
| 13. Are matrices correctly identified on Chain of Custody? | Yes ☒ | No ☐ | |
| 14. Is it clear what analyses were requested? | Yes ☒ | No ☐ | |
| 15. 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)

16. 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:	_____		

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

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

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