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06/04/2013

ENTERPRISE PRODUCTS PARTNERS L.P. ENTERPRISE PRODUCTS HOLDINGS LLC (General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

June 4, 2013

Return Receipt Requested 7012 1010 0003 7361 4901

Mr. Glenn von Gonten
New Mexico Energy, Minerals & Natural Resources
Department - Oil Conservation Division
1220 South St. Francis Drive
Santa Fe. New Mexico 87505

Re:

1st Quarter 2013 Groundwater Monitoring Report Lateral 6C September 2011 Pipeline Release

NE ¼ SW ¼, Sec 26, T28N, R11W San Juan County, New Mexico

Dear Mr. Von Gonten:

Enterprise Field Services, LLC (Enterprise) is submitting the enclosed report entitled: 1st Quarter 2013 Groundwater Monitoring Report, Lateral 6C September 2011 Pipeline Release, dated May 13, 2013. This report documents the results of the March 2013 groundwater monitoring and sampling event at the release site.

During this quarterly event, a total of eight monitor wells (MW-2 through MW-9) were monitored and sampled at the release site. Note that during this sampling event non-aqueous phase liquid (NAPL) was observed for the first time in MW-1 (0.42 feet). Dissolved-phase benzene concentrations exceeding applicable Water Quality Control Commission (WQCC) Groundwater Quality Standards were present in two wells, MW-4 (290 μ g/L) and MW-8 (41 μ g/L). Also, dissolved-phase xylene concentrations were above the WQCC standard in MW-6 (800 μ g/L). Dissolved-phase concentrations of toluene and ethylbenzene were below applicable WQCC standards.

Enterprise is evaluating response actions for the NAPL present in MW-1, and will conduct additional delineation investigations to determine the downgradient extent of the dissolved-phase groundwater plume at MW-8 if concentrations remain above WQCC standards. Dissolved-phase constituent concentrations are decreasing at monitored locations due to natural processes, and Enterprise will provide recommendations for any necessary additional remedial actions following the next routine monitoring event. If you have any questions concerning the enclosed report or recommendations, please do not hesitate to contact me at (713) 381-2286, or via email at: drsmith@eprod.com.

Sincerely,

David R. Smith, P.G.

Sr. Environmental Scientist

Rodney M. Sartor, REM Sr. Manager, Environmental

/dep

Enclosure – 1st Quarter 2013 Groundwater Monitoring Report, Lateral 6C September 2011 Pipeline Release

cc: Brandon Powell, New Mexico Oil Conservation Division, Aztec, NM

ec: Mark Kelly, Bureau of Land Management, Farmington, NM

Aaron Dailey, Enterprise Field Services, LLC, Farmington, NM Animas Environmental Services, LLC, Farmington, NM

May 13, 2013

RECEIVED OCD

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624 E. Comanche Farmington, NM 87401 505-564-2281

> Durango, Colorado 970-403-3084

David Smith
Enterprise Products Operating LLC
1100 Louisiana, Rm 13.037
Houston, Texas 77002-5227

RE: 1st Quarter 2013 Groundwater Monitoring Report Enterprise Field Services, LLC
Lateral 6C September 2011 Pipeline Release
NE½ SW½, Section 26, T28N, R11W
San Juan County, New Mexico

Dear Mr. Smith:

Animas Environmental Services, LLC (AES), on behalf of Enterprise Field Services, LLC (Enterprise), has prepared this 1st Quarter 2013 Groundwater Monitoring Report for the Lateral 6C September 2011 Pipeline Release in accordance with New Mexico Oil Conservation Division (NMOCD) and New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) regulations. This report documents the third consecutive quarterly monitoring and sampling event for the subject release location.

A groundwater investigation was completed September 7, 2012, in accordance with a workplan previously prepared by AES and dated August 3, 2012. The workplan was submitted to the NMOCD for review prior to implementing the proposed scope of work.

1.0 Site Information

1.1 Site Location and NMOCD Ranking

The release area is located on Federal land under jurisdiction of the Bureau of Land Management (BLM) within the NE¼ SW¼, Section 26, T28N, R11W, San Juan County, New Mexico. Latitude and longitude of the release were recorded as N36.63202 and W107.97400, respectively. A topographic site location map is included as Figure 1, and an aerial map showing the release location is included as Figure 2.

In accordance with NMOCD release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to the initial assessment. The release was given a ranking score of 40 based on the following factors:

 Depth to Groundwater: Known depth to groundwater is less than 20 feet below ground surface (bgs). (20 points)

- Wellhead Protection Area: The release location is not within a wellhead protection area. (0 points)
- Distance to Surface Water Body: The release location is within the floodplain of Kutz wash, which is less than 200 feet to the northeast. Kutz Wash flows north and ultimately discharges into the San Juan River. (20 points)

1.2 Initial Release Assessment and Investigation

A pipeline release was discovered on September 22, 2011, by Enterprise personnel during routine operations activities. The release was immediately reported to BLM, and a Form C-141 was submitted to NMOCD on September 29, 2011. The estimated quantity of the initial release of natural gas and condensate was 7 barrels.

1.2.1 Initial Release Assessment

AES personnel met with Enterprise representatives at the release location on September 22, 2011. Following the repair on September 23, 2011, AES collected one soil sample from the base of the small repair excavation at 6 feet below ground surface (bgs). The sample was field screened for volatile organic compounds (VOCs) with a photo-ionization detector (PID) organic vapor meter (OVM). Based on the field screening reading of 3,974 parts per million (ppm) and the anticipated shallow depth of groundwater, AES and Enterprise determined that a limited investigation of the release extent would be appropriate prior to implementing further contaminant mitigation measures.

1.2.2 Release Assessment - October 2011

On October 11, 2011, AES completed four test hole excavations around the original release location and at distances of up to 100 feet from the release point. AES recorded the encountered soil materials, collected field screening samples and soil samples for laboratory analysis from each test hole, and collected groundwater samples from two of the test holes. Soil concentrations for total benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH) for gasoline range organics (GRO) in sample TP-1 at 10 feet exceeded the applicable NMOCD action levels with 169 mg/kg total BTEX and 1,429 mg/kg TPH. Benzene, total BTEX, TPH-GRO, and TPH for diesel range organics (DRO) concentrations in sample TP-2 at 15 feet also exceeded the applicable NMOCD action levels with 45 mg/kg benzene, 513 mg/kg total BTEX, and 5,170 mg/kg TPH (GRO/DRO). Although some elevated OVM field screening values were recorded, BTEX and TPH concentrations in the remaining soil samples were either below laboratory detection limits or below applicable NMOCD action levels.

Groundwater samples were collected for laboratory analysis from TP-2 and TP-4. During sample collection, a petroleum sheen was observed in TP-2. Dissolved phase benzene, toluene, and xylene concentrations were reported above the New Mexico Water Quality Control Commission (WQCC) standards in TP-2 with 9,800 µg/L benzene, 15,000 µg/L

toluene, and 6,700 μg/L xylene. Detailed laboratory results were summarized in the AES letter report entitled *Soil and Groundwater Sampling Results* and dated October 28, 2011.

Following receipt of laboratory analytical results on October 24, 2011, Enterprise notified NMOCD of the confirmed groundwater impact by submitting a Form C-141. Based on field screening and laboratory analytical results, AES recommended that Enterprise conduct further delineation of the soil and groundwater contamination in order to determine the most effective mitigation of the release.

1.2.3 Site Investigation - November 2011

On November 30, 2011, AES completed an additional site investigation, which included the installation of eight soil borings and the collection of soil and groundwater samples. Soil samples showed that contaminant concentrations exceeded NMOCD action levels in borings SB-2, SB-7, and SB-8. The highest benzene and total BTEX concentrations were reported in SB-2, with 31 mg/kg benzene and 580 mg/kg total BTEX. The highest TPH concentration was also reported in SB-2 with 7,500 mg/kg.

Dissolved phase analytical results indicated groundwater was impacted above the WQCC standard in SB-2W (benzene, toluene, and xylene), SB-3W (benzene), and SB-7W (benzene and toluene). The highest concentrations for benzene, toluene, and xylenes were reported in SB-2W with 2,800 $\mu g/L$ benzene, 5,700 $\mu g/L$ toluene, and 4,000 $\mu g/L$ xylenes.

1.2.4 Groundwater Investigation – September 2012

On August 20 through September 7, 2012, AES completed a groundwater investigation in order to further delineate the extent of the dissolved phase hydrocarbon contaminants associated with the Lateral 6C pipeline release. During the site investigation, AES personnel installed nine soil borings which were advanced to a total depth of 25 feet bgs and completed as monitor wells MW-1 through MW-9.

The local site lithology consists of alluvium and fluvial material from the adjacent Kutz Wash overlaying sandstone bedrock. Soil observed during the investigation was brown to tan, fine to medium grained, silty to clayey sand, with some gravel at depths greater than 20 feet bgs. Moisture level increased with depth from dry to moist in the upper 10 feet to moist to wet down to contact with bedrock. Bedrock material was grey, fine grained, firm to moderately hard, wet sandstone.

During the investigation, soil laboratory analytical results showed that petroleum hydrocarbon concentrations were not above NMOCD action levels in any of the soil borings. Laboratory analytical results showed groundwater contaminant concentrations above the WQCC standard of 10 μ g/L for benzene in MW-1 (2,200 μ g/L), MW-2 (270 μ g/L), MW-4 (18 μ g/L), and MW-8 (41 μ g/L). Additionally, dissolved phase toluene above

the WQCC standard of 750 μ g/L was reported in MW-2 with 1,100 μ g/L, and xylene above the WQCC standard of 620 μ g/L was reported in MW-1 (650 μ g/L), MW-2 (1,800 μ g/L), and MW-6 (2,200 μ g/L).

1.2.5 Groundwater Monitoring and Sampling – December 2012

Site monitor wells were monitored and sampled by AES on December 20, 2012. Laboratory results confirmed dissolved phase benzene concentrations above the WQCC standard of 10 μ g/L in two wells, including MW-1 (1,100 μ g/L) and MW-2 (26 μ g/L). Also, dissolved phase xylene concentrations were above the WQCC standard of 620 μ g/L in MW-6 with 1,200 μ g/L. Details of the groundwater sampling event were presented in the *Quarterly Groundwater Sampling Report* dated February 13, 2013.

2.0 Groundwater Monitoring and Sampling – March 2013

On March 20, 2013, groundwater monitoring and sampling were conducted by AES in MW-1 through MW-9. Work was completed in accordance with the workplan prepared by AES and dated August 3, 2012, 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.

2.1 Groundwater Measurements and Water Quality

Prior to sample collection, depth to groundwater in each well was measured with a Keck Water Level Indicator, and water quality data was measured with a YSI Water Quality Meter. Water quality measurements were recorded and included pH, temperature, conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP). Depth to groundwater measurements and water quality data were recorded onto Water Sample Collection forms. Note that 0.42 feet of non-aqueous phase liquid (NAPL) or "free product" was observed for the first time in MW-1 during this sampling event. Groundwater elevations increased by an average of 0.23 feet across the site, and depths to groundwater were observed to range from 14.63 feet below top of casing (TOC) in MW-8 to 19.10 feet below TOC in MW-5. The groundwater gradient was calculated to be approximately 0.008 foot/foot to the northwest, and groundwater gradient contours are included on Figure 3.

Following depth to water measurement, each well was purged with a disposable bailer until recorded temperature, pH, conductivity, and DO measurements were stabilized. All data was recorded onto Water Sample Collection Forms. Groundwater temperature ranged from 13.63°C in MW-3 to 14.88°C in MW-2, and conductivity ranged from 6.700 mS in MW-9 to 8.893 mS in MW-3. DO concentrations were between 0.79 mg/L in MW-6 and 2.62 mg/L in MW-3, and pH ranged from 7.23 in MW-4 to 7.50 in MW-2. Although DO was recorded during field activities, it should be noted that due to the use of bailers,

the accuracy of dissolved oxygen measurements is limited. Depth to groundwater measurements and water quality data are summarized in Table 1. Water Sample Collection forms are presented in the Appendix.

2.2 Groundwater Laboratory Analyses

Groundwater samples were collected with new disposable bailers from a total of eight monitor wells and transferred into appropriate sample containers, labeled accordingly, and documented on Water Sample Collection Forms. Samples were shipped in insulated coolers containing ice at less than 6°C to Hall Environmental Analytical Laboratory (Hall) in Albuquerque, New Mexico. All groundwater analytical samples were analyzed for BTEX per USEPA Method 8260.

2.2.1 Groundwater Analytical Results

Groundwater laboratory analytical results showed that dissolved phase benzene concentrations were above the WQCC standard of 10 μ g/L in MW-4 (290 μ g/L) and MW-8 (41 μ g/L). Dissolved phase xylene concentrations were above the WQCC standard of 620 μ g/L in MW-6 with 800 μ g/L. Dissolved phase toluene and ethylbenzene concentrations were below the WQCC standard of 750 μ g/L in all wells sampled. Tabulated groundwater analytical results are presented in Table 2 and on Figure 4, and dissolved phase benzene and xylene contours are presented on Figures 5 and 6, respectively. Groundwater laboratory analytical reports are presented in the Appendix.

3.0 Conclusion and Recommendations

A total of eight monitor wells (MW-2 through MW-9) were monitored and sampled at the Lateral 6C September 2011 pipeline release location by AES on March 20, 2013. Note that during this sampling event NAPL was observed for the first time in MW-1 (0.42 feet).

Laboratory results confirmed dissolved phase benzene concentrations above the WQCC standard of 10 μ g/L in two wells, including MW-4 (290 μ g/L) and MW-8 (41 μ g/L). Also, dissolved phase xylene concentrations were above the WQCC standard of 620 μ g/L in MW-6 with 800 μ g/L but have decreased over time. Dissolved phase benzene and xylene concentrations decreased in MW-2 to below detection limits since the December 2012 sampling event, but benzene and xylene concentrations rebounded in MW-4 (to 290 μ g/L). Dissolved phase toluene and ethylbenzene concentrations were below WQCC standards in all sampled monitor wells.

Based on increased groundwater elevations across the site, the newly observed presence of NAPL in MW-1, and laboratory analytical results from the March 2013 sampling event, it is possible that as groundwater elevations have risen, a contaminant lens has been encountered in contaminated soils left onsite. Groundwater continues to be impacted above the WQCC standard for benzene and xylenes. AES recommends continued

monitoring and sampling of site monitor wells on a quarterly basis until enough data has been gathered to determine a corrective action plan. The next groundwater sampling event is tentatively scheduled for June 2013.

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

Sincerely,

Sandrer R. lupps Landrea Cupps

Environmental Scientist

Elizabeth V MeNelly

Elizabeth McNally, P.E.

Attachments:

Tables

Table 1. Summary of Groundwater Measurements and Water Quality Data

Table 2. Summary of Groundwater Laboratory Analytical Results

Figures

Figure 1. Topographic Site Location Map

Figure 2. Aerial Site Map

Figure 3. Groundwater Elevation Contours, March 2013

Figure 4. Groundwater Contaminant Concentrations, March 2013

Figure 5. Dissolved Benzene Concentration Contours, March 2013

Figure 6. Dissolved Xylene Concentration Contours, March 2013

Appendix

Water Sample Collection Forms

Groundwater Analytical Laboratory Reports (Hall 1303882)

cc:

Glenn von Gonten

New Mexico Oil Conservation Division

1220 S. St. Francis Drive

Santa Fe, New Mexico 87505

Brandon Powell New Mexico Oil Conservation Division 1000 Rio Brazos Road Aztec, New Mexico 87410

Aaron Dailey
Via electronic copy
Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

Mark Kelly
Via email with delivery confirmation receipt
mkelly@blm.gov
Bureau of Land Management
6251 College Blvd., Suite A
Farmington, New Mexico 87401

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TABLE 1. SUMMARY OF GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA Enterprise Field Services, LLC Lateral 6C September 2011 Pipeline Release San Juan County, New Mexico

			Depth to NAPL	Depth to Water	NAPL		Corrected			Dissolved	Тетр.
		Surveyed	(ft below	(ft below	Thickness	GW Elev.	GW Elev.	l	Conductivity	Oxygen	Temp.
Well ID	Date	TOC (ft)	тос)	тос)	(ft)	(ft amsl)	(ft)	pН	(mS)	(mg/L)	(ºC)
MW-1	07-Sep-12	5579.73		15.78		5563.95		7.02	5.616	1.72	17.31
MW-1	20-Dec-12	5579.73		15.69		5564.04		7.38	4.567	1.41	16.71
MW-1	20-Mar-13	5579.73	15.31	15.73	0.42	5564.00	5564.30	NA	NA	NA	NA
MW-2	07-Sep-12	5579.39		16.29		5563.10		7.31	4.234	1.03	16.67
MW-2	20-Dec-12	5579.39		16.22		5563.17		7.61	3.511	1.45	15.42
MW-2	20-Mar-13	5579.39		15.97		5563.42		7.50	6.788	1.06	14.88
											T .
MW-3	07-Sep-12	5579.52		15.98		5563.54		7.33	5.706	2.24	15.29
MW-3	20-Dec-12	5579.52		15.79		5563.73		7.13	4.496	2.30	13.84
MW-3	20-Mar-13	5579.52		15.50		5564.02	<u> </u>	7.33	8.893	2.62	13.63
MW-4	07-Sep-12	5580.36		15.59		5564.77		7.30	5.564	1.46	15.77
MW-4	20-Dec-12	5580.36		15.51		5564.85		7.06	4.106	1.51	14.94
MW-4	20-Mar-13	5580.36		15.25		5565.11		7.23	7.897	1.17	14.00
MW-5	07-Sep-12	5583.53		19.35		5564.18		7.34	4.137	1.53	14.89
MW-5	20-Dec-12	5583.53		19.28		5564.25		7.00	3.438	2.65	13.74
MW-5	20-Mar-13	5583.53		19.10		5564.43		7.28	6.957	2.29	13.86
MW-6	07-Sep-12	5582.22		18.55		5563.67		7.38	4.833	1.24	15.43
MW-6	20-Dec-12	5582.22		18.49		5563.73		7.46	3.932	1.09	14.08
MW-6	20-Mar-13	5582.22		18.27		5563.95		7.38	7.571	0.79	14.36
MW-7	07-Sep-12	5582.24		19.03		5563.21		7.59	4.542	1.38	15.24
MW-7	20-Dec-12	5582.24		18.97		5563.27		7.53	3.660	1.16	13.86
MW-7	20-Mar-13	5582.24		18.79		5563.45		7.45	7.512	1.45	14.40

TABLE 1. SUMMARY OF GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA Enterprise Field Services, LLC Lateral 6C September 2011 Pipeline Release San Juan County, New Mexico

Well ID	Date	Surveyed TOC (ft)	Depth to NAPL (ft below TOC)	Depth to Water (ft below TOC)	NAPL Thickness (ft)	GW Elev. (ft amsl)	Corrected GW Elev. (ft)	pН	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temp. Temp. (ºC)
MW-8	07-Sep-12	5577.81		14.96		5562.85		7.57	4.068	1.30	16.16
MW-8	20-Dec-12	5577.81		14.87		5562.94		7.56	3.339	0.97	15.25
MW-8	20-Mar-13	5577.81		14.63		5563.18		7.41	7.084	2.06	14.86
MW-9	07-Sep-12	5582.48		17.55		5564.93		7.45	4.583	1.48	15.61
MW-9	20-Dec-12	5582.48		17.47		5565.01		7.14	3.369	2.29	13.06
MW-9	20-Mar-13	5582.48		17.28		5565.20		7.30	6.700	2.56	13.70

Notes:

NA - not analyzed

TABLE 2. SUMMARY OF GROUNDWATER LABORATORY ANALYTICALS RESULTS Enterprise Field Services, LLC Lateral 6C September 2011 Pipeline Release San Juan County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl- benzene	Xylenes					
		μg/L	μg/L	μg/L	μg/L					
Sa	mple Method	EPA Method 8021								
WQ	CC STANDARD	10	750	750	620					
MW-1	07-Sep-12	2,200	350	68	650					
MW-1	20-Dec-12	1,100	250	37	180					
MW-1	20-Mar-13	F	ree Product	Present (0.4	2 feet)					
	1									
MW-2	07-Sep-12	270	1,100	66	1,800					
MW-2	20-Dec-12	26	49	5.1	250					
MW-2	20-Mar-13	<5.0	<5.0	<5.0	67					
MW-3	07-Sep-12	<2.0	<2.0	<2.0	<4.0					
MW-3	20-Dec-12	<2.0	<2.0	<2.0	<4.0					
MW-3	20-Dec-12 20-Mar-13	<2.0	<2.0	<2.0	<4.0					
INIAA-2	20-19181-13	\2.0	\2.0	\\\ 2.0	<u> </u>					
MW-4	07-Sep-12	18	5.1 <2.0		<4.0					
MW-4	20-Dec-12	<2.0	<2.0	<2.0	<4.0					
MW-4	20-Mar-13	290	110	<2.0	15					
	07.0 40				T 40					
MW-5	07-Sep-12	<2.0	<2.0	<2.0	<4.0					
MW-5	20-Dec-12	<2.0	<2.0	<2.0	<4.0					
MW-5	20-Mar-13	<2.0	<2.0	<2.0	<4.0					
MW-6	07-Sep-12	<5.0	<5.0	260	2,200					
MW-6	20-Dec-12	<5.0	<5.0	180	1,200					
MW-6	20-Mar-13	<5.0	<5.0	120	800					
	1			T						
MW-7	07-Sep-12	<2.0	<2.0	<2.0	<4.0					
MW-7	20-Dec-12	<2.0	<2.0	<2.0	2.4					
MW-7	20-Mar-13	<2.0	<2.0	<2.0	<4.0					
MW-8	07-Sep-12	41	40	3.8	320					
MW-8	20-Dec-12	<2.0	<2.0	<2.0	20					
MW-8	20-Dec-12 20-Mar-13	41	36	<2.0	89					
IAIAA-O	_ ZO-14101-13	71	30	\2.0	03					
MW-9	07-Sep-12	<2.0	2.4	<2.0	<4.0					
MW-9	20-Dec-12	<2.0	<2.0	<2.0	<4.0					
MW-9	20-Mar-13	<2.0	<2.0	<2.0	<4.0					

TABLE 2. SUMMARY OF GROUNDWATER LABORATORY ANALYTICALS RESULTS Enterprise Field Services, LLC Lateral 6C September 2011 Pipeline Release San Juan County, New Mexico

Well ID	Date Sampled	Benzene	Toluene	Ethyl- benzene	Xylenes			
	-	μg/L	μg/L	μg/L	μg/L			
Sample Method		EPA Method 8021						
WQCC STANDARD		10	750	750	620			

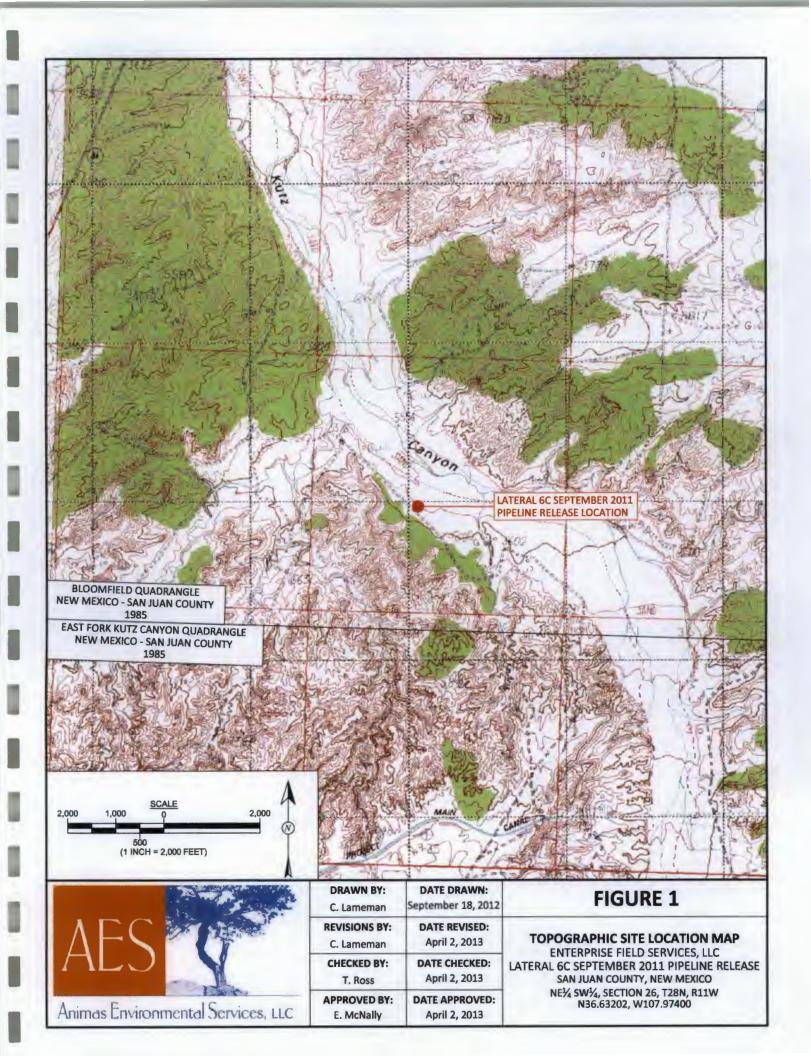
Notes:

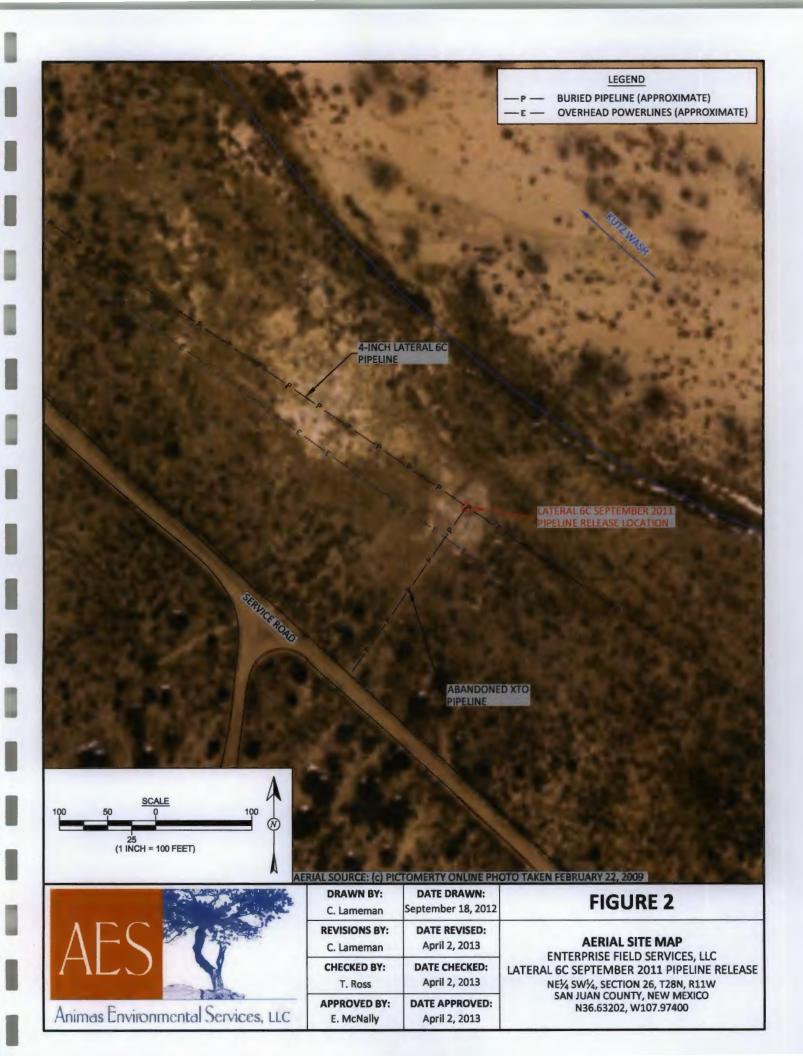
Analyte not detected above listed method limit

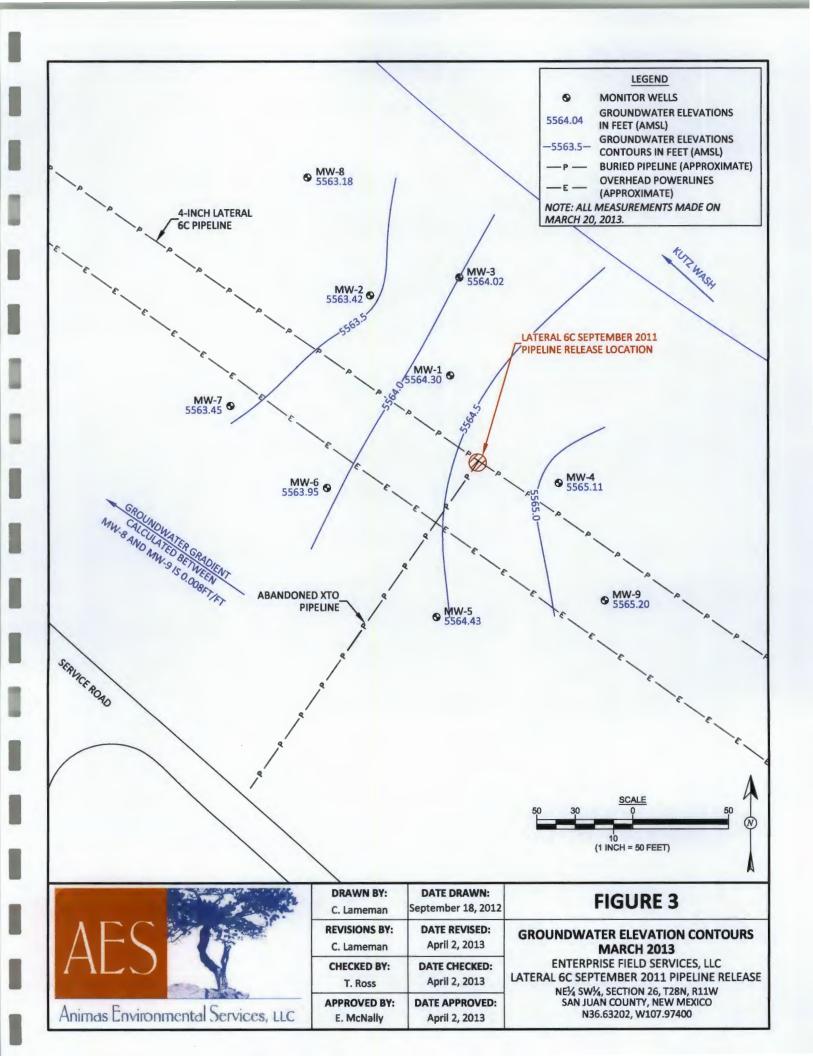
μg/L

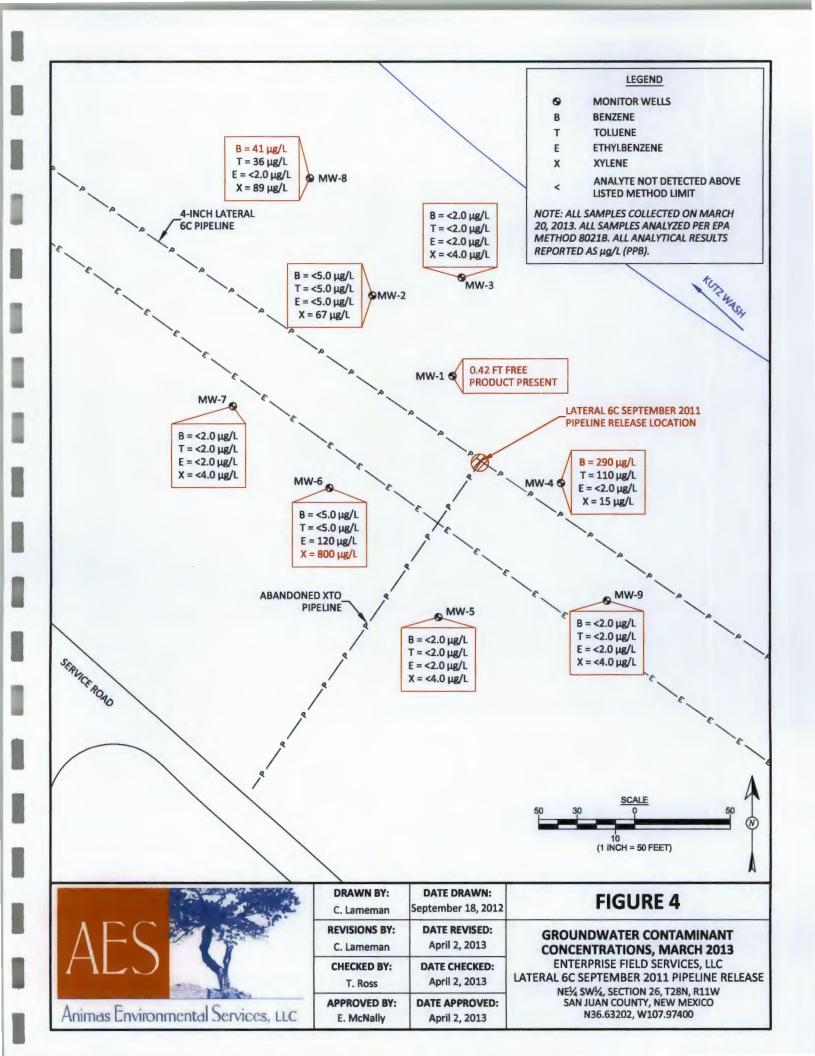
<

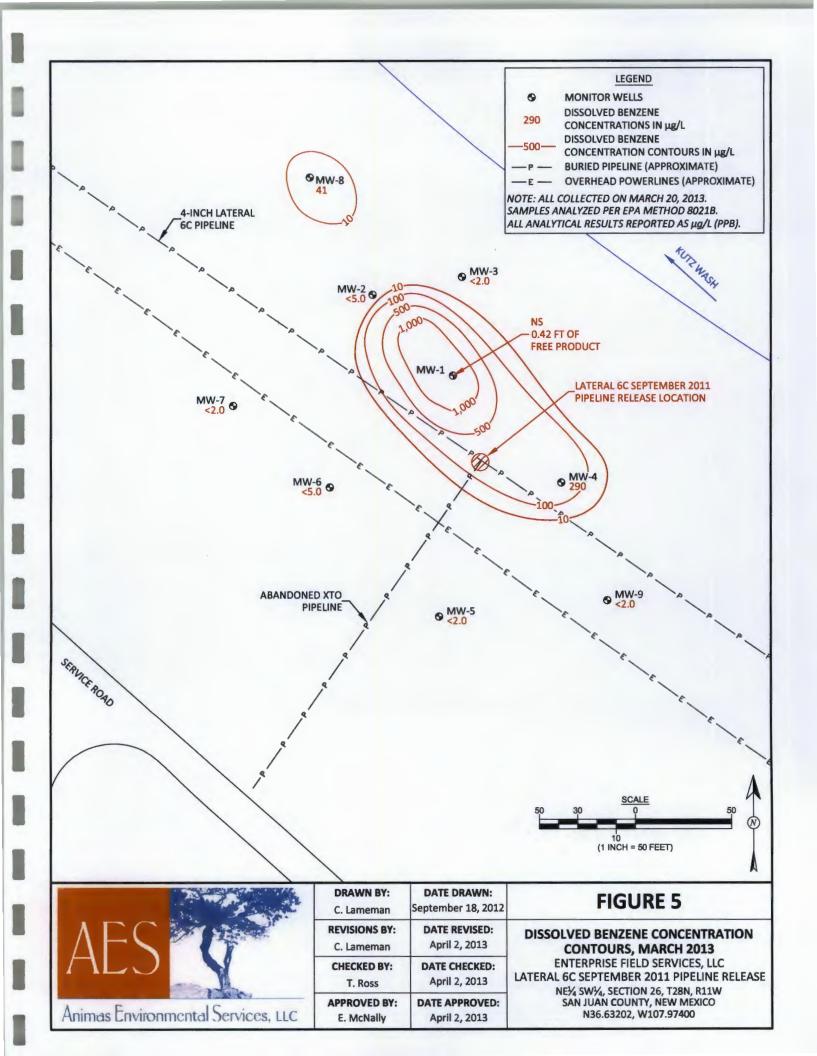
Micrograms per liter (ppb)

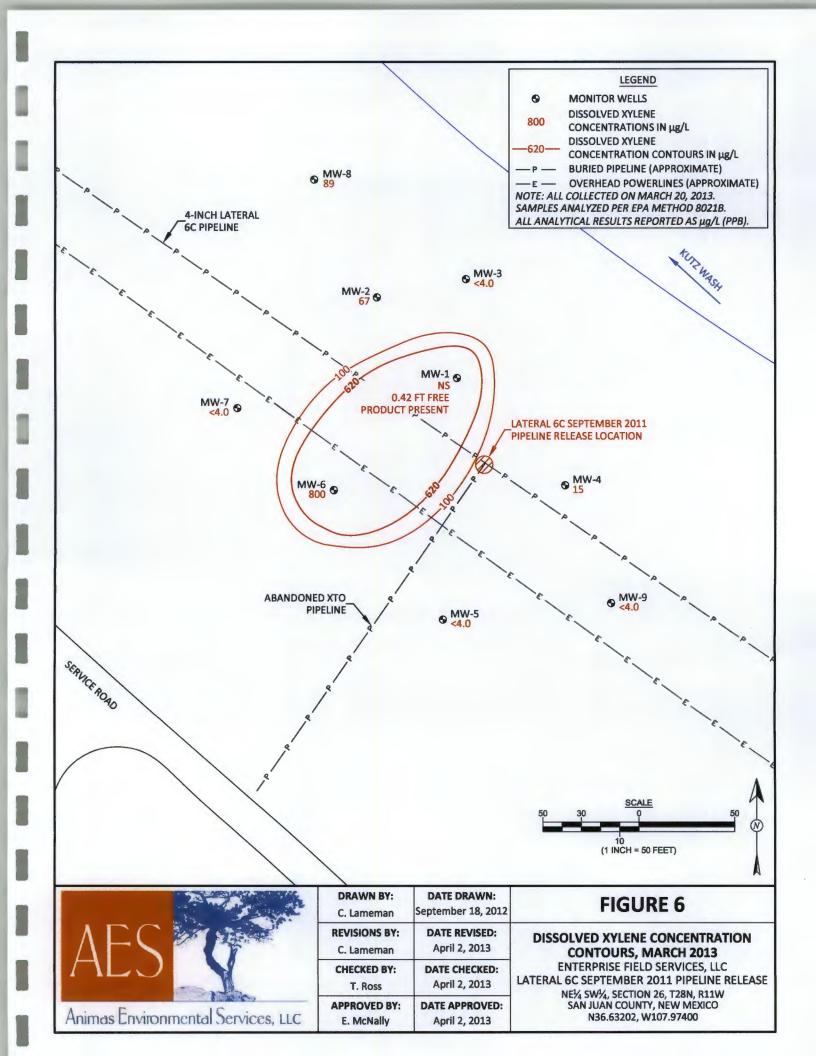












DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services

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

		· · · · · · · · · · · · · · · · · · ·
Project:	Groundwater Sampling	Project No.: AES 110904
Site:	Enterprise Field Services, LLC	Date: 3-20-2012
Location:	Lateral 6C	Time: 0831
Tech:	L. lament	Form:

Well I.D.	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	
MW-9		17.28		24.06 TOW! 32" Above ground well. 25.72 TI)W: 29" " " " " 23.86 TOW: 30" " HAS odor in well.
MW-5		19.10		25.72 TI)W: 29" " " "
MW-4		15.25		23.86 TOW: 30" " HAS odoR in well.
nw.7		18.79		Dla Z.R This 34" Aboute a rond well
mw-3		15.50		25.77 Tow: 30" Above grand well.
mw.8		14.63		24.65 TOW: 2' Above grand well
mw-6		18.27		25.77 TOW: 30" plave grand well. 24.65 TOW: 2' Above grand well 25.20 TOW 30" Above grand well 25.06 TOW 30" " " " Odor
MW.Z		15.97		25,06 TOW 30" " " "
mw-1	15.31	15.73		27.56 TOW 30" " ". Odor
	, .			
				

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

Water Sa	ampling R	ecord		Animas Environmental Services						
Monitor W	ell No: /				624 E. C	Comanche, Farmington	NM 87401			
	,				Tel. (50	5) 564-2281 Fax (505)	324-2022			
Project:	Ground	ateral 6C	oling	_	Projec	ct No.:				
Site:	Enterprise I	_ateral 6C "		Date: 3/20/2013						
Location:				Time: 3						
Sampler:	LAMONE	, L.	- (ather: <u>Cleun) wr</u>	mm			
Sampling I		NO SAMPL	5 (NAPL)		Temper	ature:				
Depth of W	27.54	0 1		ell Diam						
Depth to W		ProducTi	75.31 Site							
	Temp	Conductivity	DO		ORP	PURGED VOLUME				
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)	(gallons)	Notes/Observations			
,										
Analytical I	Parameters	Sampled For (i	nciude Me	thod #):						
			No	SAMI	OLE	NAPL				
					,					
		4.5	1 1							
Disposal o	f Purged Wa	ater:	/ A							
Chain of C	ustody Rec	ord Complete?	(Y/N)	MA						
Analytical I	Laboratory:		NIA	L						
		ng Sampling:	N	MA						
		<u> </u>								
Other Notes/Comments										
		100								

Water Sa	mpling R	ecord			Anima	as Environmenta	I Services				
Monitor W	ell No: 2					Comanche, Farmington 5) 564-2281 Fax (505)					
Project:	Ground	wysten <u>Sam</u> _ateral 6C	Olong	-	Projec	ct No.:					
Site:	Enterprise I	_ateral 6C		Date: 3/20/20/3							
Location:				Time: 1341 (357 Sample)							
Sampler:	LAMON	5, L				ather: <u>Clean/coa</u>	9/				
Sampling I		BRUER			Temper						
Depth of W		25.06			ell Diam Elevatio	• • — — — — — — — — — — — — — — — — — —					
Depth to W	Temp	15.97 Conductivity	DO	Site	ORP	PURGED VOLUME					
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)	(gallons)	Notes/Observations				
1345	14.90	6.543	2.66	7.95 -	154.2		Clear laravish Ha				
1347	14.90	6.644	1.88	7.80	-174.5	1.0 gal.	grayish Hzo Skahtsh	een			
1350	14.91	6.631	1.2le	7.69	-2000	20 gal.	Geor / grayish Hzo grayish Hzo slight sh gray sit shear Hzo gray sit sligh Sheen gray sit slight	•			
1353	1491	6.798	1.46	7.60	-211.0	3.5 gal.	arry silt Sligh Sheen				
1357	14.88	6.788	1.0le	7.50	-243.1	4.5 gal	gray silt Slight				
						0	Sheen & odor				
				<u> </u>							
Analytical	Doromotoro	Sampled For (i	inaluda Ma	thad #\:	900	BTEX					
Analytical	Parameters	Sampled For (include wie	uiou #j.	002	DIEX					
											
Disposal o	f Purged W	ater:		ENVIR	TECH	LAND FARN					
		ord Complete?		1/	.,,,,,,						
	Laboratory		<u> </u>	H.E.A.	1.						
		ng Sampling:		, = -							
Other Note	Other Notes/Comments										
9,09	Heo colum	N									
1.48	volune										
4.50	To be Puro	red									
		1									
		1					İ				

Water Sa	ampling R	lecord		Animas Environmental Services							
Monitor W	ell No: 3				624 E. Comanche, Farmington NM 87401						
						5) 564-2281 Fax (505)	l l				
Project:	Ground wy	ten Samp).	ing	_	Proje	ct No.:					
Site:	Enterprise	Lateral 6C		_	Date: 3/20 /2 013						
•	Location:					Time: 1201 (1221 SAMPLE)					
Sampler:	LAMONE,			_		eather: Cleur / co.	0				
Sampling		BAILER	-	-	•	rature: 50°					
Depth of V	• •	25.77		_	/ell Diam						
Depth to V	vater (π):	15.50	г	Site	Elevation						
	Temp	Conductivity	DO		ORP	PURGED VOLUME					
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)	(gallons)	Notes/Observations				
1206	13.82	9.576	4.41	7.45	-44.5	1st Bulen	Mens				
1209	13.44	9.918	3.63	7.46	-24.3	1.0 gal	Ut. Tan H20				
1212	1342	9.707	3.05	7.38	-18.9	2.0 gal,	Lt Tan 1720				
1215	13.53	9.317	3.02	7.36	-14.0	3.0 gal-	Lt Fan H20				
1218	13.47	9.184	3.0le	7.35	-10.3	4.0 gal.	Lt Tan H20				
1221	13.63	8.893	2.62	7.33	-6.2	3.0 gal. 4.0 gal. 5.0 gal.	Tan / 5,1+ H20				
							,				
		100			<u> </u>						
		-									
				<u> </u>	L						
Analytical	Parameters	Sampled For (i	nclude Me	thod #):	<i>8021</i>	BTEX					
Dienocal o	f Durand We	otor: Tot. 6	and d	rum 1	ر مار المارا	d to Environted	w loun Fine				
Chain of C	ustody Pos	ord Complete?	/V/NI) \	1	Depiver	a w Enviraged	TO TO PARENT				
Analytical i	aboratory	Hall	ENVIDEN	monte	1 des.	whiteal IAR					
Fauinment	Lised Durin	ng Sampling	Belle	UST	Drad	ut Prope twin					
-quipment	Joeu Duill	y camping.	vaiur ;	70+ 7	7.000	rei Filpe W-IN					
Other Nete	s/Comment	•									
			<u> </u>								
	Hzo Column										
	Ho volum			- 4.0							
5.0 7	be Purg	ea									

Water S	ampling R	lecord			Anima	as Environmenta	l Services				
Monitor W	/ell No: ႕					Comanche, Farmington					
						5) 564-2281 Fax (505)	324-2022				
Project:		Ater SAMPL	ING	-	Projec	ct No.:					
Site: Location:	Enterprise	Lateral 6C		-	Date: 3/20/20/3 Time: //03 (1/21 SAMPLE)						
Sampler:	LamonE,	1.		Weather: Can / Clear Brewy							
Sampling		Builer		- Δi	Weather: Cool Clear Breuzy Air Temperature: 28 F						
	Depth of Well (ft): 23.86					n. (in.):					
Depth to V		15.26		-	Elevation	· ·					
	Temp	Conductivity	DO		ORP	PURGED VOLUME					
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(gallons)	Notes/Observations				
1108	13.43	7.986	3.64	7.45	-77.2	1st Barlen	Clear				
1112	13.88	8.272	2.01	7.31	-106.4	1.25 gal.	"Murky" Slightsilt				
1115	13.80	8.114	1.17	7.27	-105.0	2.25 gal 3.25 gal	it it it				
1117	13.80	8.127	1.17	7.25	-100.9		Gray silt Hzo				
1121	14.00	7,897	8-31 Jul	7.23	-81.1	4.25 gal	Gray Silty 1/20				
							, ,				
· · · · · · · · · · · · · · · · · · ·											
		0 15 (7.	001 000					
Analytical	Parameters	Sampled For (i	nclude Me	thod #):	80	021 BTE					
Dienoeal o	f Purged Wa	ator: FA	UVIROTEC	H 10	A 10 MA	n M					
		ord Complete?		V	CIDER						
	Laboratory:	ora completer	1	H.E.AL							
		g Sampling:		1.0.710							
-46-00		2kiii.									
Other Note	s/Comment	s									
8.6	Column										
1.41	volumn										
4. 25	To be p	wged									

Water Sa	ampling R	ecord		Animas Environmental Services						
Monitor W	ell No: 5	-			624 E. C	Comanche, Farmington	NM 87401			
					Tel. (50	5) 564-2281 Fax (505)	324-2022			
Project:	Ground in	Her SAMPlir	79			ct No.:				
Site:	Enterprise	Lateral 6C	9	-		Date: 3/20/2013				
Location:				-		Time: 1035	(1053 Sample			
Sampler:	Lamone	. L.		-	Weather: Clear Cool Breezy					
Sampling	Method:	Bailer		- Air	Air Temperature: 28°					
Depth of V		25.72		_	ell Diam					
Depth to V		19.10			Elevation					
	Temp	Conductivity	DO		ORP	PURGED VOLUME				
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)	(gallons)	Notes/Observations			
1044	13.51	6.673	2.14	7.41	-7.7	1st Baden	Clear 1/20			
1047	13,77	6.842	1.69	7.30	-6.0	1.25 gal	Tan Some Silt			
1050	13.87	6.364	1.95	7.29	-5.1	2.25 gal	Tons ""			
1053	13.86	6.957	2.29	7.28	- 1.0	3.25 gal	Tan " "			
			-72							
Analytical	Parameters	Sampled For (i	nclude Me	thod #):	E	OZI BTEX				
Disposal o	f Purged W	ater:		TEUH L						
Chain of C	ustody Rec	ord Complete?								
Analytical	Laboratory:		H.E	AL.						
Equipment	Used Duri	ng Sampling:								
Other Note	s/Commen	ts								
	2 Colum									
1.08	volume									
3.24	To be purged									
				<u></u>						

Water Sa	mpling R	ecord			Anima	as Environmenta	l Services				
Monitor W	ell No: 💪					Comanche, Farmington					
					Tel. (505	5) 564-2281 Fax (505) :	324-2022				
Project:	Gromdon	ster samp.	ling		Projec	et No.:					
Site:	Enterprise I	_ateral 6C	J	_	Date: 3/20/2013						
Location:				_		Time: /3/2	(1329 SAMPLE)				
Sampler:	LAMO,	VE, L		_	We	ather: COEAR / W	ARM				
Sampling		BAILER				ature: 5/° F					
Depth of V		25,20	Va	_		. (in.): <u>&</u>	· · · · · · · · · · · · · · · · · · ·				
Depth to V	/ater (ft):	18.27	T	Site	Elevation	·					
	Temp	Conductivity	DO		ORP	PURGED VOLUME					
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(gallons)	Notes/Observations				
1316	14.87	6.502	1.72	7.46	-270.6	1st Bailen	Gray Hru Odar Shee				
1319	14.67	7.442	1.44	7.39	-303.4	1.0 gal.	Gray Hzv Odar Sheer Gray Hzo Odor Sheer Gray Hzo odor/Sheer				
1324	14.49	7.435	0.71	7.40	3/3.5	2.0 gal 3.5 gal.	gray 1/20 odor/Shen				
1329	14.36	7.571	0.79	7.38	311.5	3.5 gal.	gray, silt odor				
							Sheen Hrs				
							• "				
Analytical	Parameters	Sampled For (i	nclude Me	thod #):	81	521 BTEX					
	f Purged W	ater: ord Complete?	Eav (Y/N)	vino TE	ECH L	ANDFARM					
Analytical	Laboratory:			H.E.A	<u></u>	1000	· · · · · · · · · · · · · · · · · · ·				
Equipment	Used Durin	ng Sampling:									
Other Note	s/Comment	s									
6.93 H	20 Column	J									
	Olume			- <u></u> -							
3.40 1	o be purg	ed									
	, ,										

Water Sa	Vater Sampling Record				Animas Environmental Services						
Monitor W	ell No:	7-			624 E. C	Comanche, Farmington	NM 87401				
					Tel. (50	5) 564-2281 Fax (505)	324-2022				
Project:	GROUND	vater SAMP	ling	Project No.:							
Site:	Enterprise I	Lateral 6C	7	_	Date: 3/20/2013						
Location:						Time: 1/29 (1144 SAMPLE)				
Sampler:	LAMONE,	L.		_	We	ather: cool/clew?					
Sampling Method: Bailer				Aiı	r Temper						
Depth of W		26.28		W	ell Diam	. (in.): ユ					
Depth to V	Vater (ft):	18.79		Site	Elevation	on (ft):					
	Temp	Conductivity	DO		ORP	PURGED VOLUME					
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(gallons)	Notes/Observations				
1133	14.03	7.414	3.49	7.45	-2405	1st Bulen	GRAY - Black. Hz				
1136	14.52	7.386	1.90	7.46	-232.4	1.0 gal	black H20 OdoR				
1140	14.47	7.414	1.21	7.43	-233.5	2.50 gal	black, silty HzD				
1144	14.40	7.512	1.45	7.45	-229.1	1 ⁴ Barlen 1.0 gal 2.50 gal 3.75 gal	GRAY - Black 1420 Codor black 420 Codor black, 51/4 1/20 Black, 51/4 Order				
							,				
1.44.				I	ll						
Analytical I	Parameters	Sampled For (i	nclude Me	thod #)·	52	DZI BTEX					
Allalytical	arameters	oampieu i oi (i	iiciaac iiic	tilou #j.		151CX					
	-		1487								
				1.14		· · · · · · · · · · · · · · · · · · ·					
		. –		/							
	f Purged Wa		NIRVTE	CH L	ANDFR	HLM					
		ord Complete?	· · · · · · · · · · · · · · · · · · ·	У							
Analytical i	_aboratory:		Н	E.HL.							
Equipment	Used Durin	ig Sampling: ⅓	SI; proc	tuct P	robe;	Twint; Builer	5 gul puctels				
		2 55 ga	u drum:	5)							
Other Note	s/Comment	s									
7.49	420 Columi	N .									
1.22 H	120 Volume	r		4.0							
3.67 To	be Purged										
	U										

Water Sa	ampling R	ecord		Animas Environmental Services						
Monitor W	ell No: 8				624 E. (Comanche, Farmington	NM 87401			
				Tel. (505) 564-2281 Fax (505) 324-2022						
Project:	Granda	rater Samp.	ling	Project No.:						
Site:	Enterprise	Lateral 6C '		-	Date: 3/20/20/3					
Location:	***				18/-	Time: <u>/233</u>	(1304 SAMPLE)			
Sampler: <u>Umo NE</u> , L Sampling Method:			- ^: .	vve Tompo	eather: Cleure / W	4nn				
	Depth of Well (ft): 24. 65					rature: 5/°F '				
Depth to V	` '	14.63	AV-1	_						
	Temp	Conductivity	DO		Site Elevation (ft): ORP PURGED VO					
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)	(gallons)	Notes/Observations			
1238	15.00	6.549	2.90	7.61	-39.8	1st Bailer	Clear Hzo			
1244	14.91	6.553	1.18	7.50	-46,3	1.0 gal.				
1251	14.98	6.549	0.78	7.46	-50.1	20 gal. 3.0 gal. 4.0 gal 5.0 gal	cloudy, silt Hzo			
1254	14.69	6.730	1.79	7.33	-/22./	3.0 gal.	cloudy silf Hzo			
1257	14.84	6573	1.32	7.41	-86.3	4.0 gal	cloudy silt Hzo			
1304	14.86	7.084	2.06	7.41	-155.6	5.0 gal	cloudy silt Hzo			
L						,	,			
						14 14 14 14 14 14 14 14 14 14 14 14 14 1				
Analytical	Daramatara	Commind For /:	malicala Mar	41	O	1011 PT-1				
Analytical	Parameters	Sampled For (i	nciuae me	tnoa #):	<u> </u>	021 BTEX				
					AV					
					-					
Disposal of	Purged Wa	iter:	ENVI	ROTEL	H L	ANDFARM				
Chain of Cu	ustody Reco	ord Complete?	(Y/N)							
Analytical L	_aboratory:			I.E.A.	<u> L.</u>	* 4 7				
Equipment	Used Durin	g Sampling:								
Other Notes	s/Comments	S								
10.02	Hzo Col	umN								
1.64	Volume									
5.0	gal. To	be Runged								
	J	J								

Water S	ampling R	lecord			Anima	as Environmenta	I Services				
Monitor V						Comanche, Farmington					
		•				5) 564-2281 Fax (505)					
Project:	Monte. G	round WAter S	ampling	_	Project No.:						
Site:	Enterprise	Lateral 6C				Date: 3/20/2012					
		<u> </u>		-		Time: 1000	(1030 SAMPLE)				
Sampler:	LAMO N	BailER				eather: Clean cool					
Sampling	Metnoa:	BAILER	. ~		Air Temperature: 28° F Well Diam. (in.): 2						
Depth of Well (ft): 17.28				Elevation	• • • • • • • • • • • • • • • • • • • •						
Dopan to	Temp	Conductivity	DO		ORP	PURGED VOLUME					
Time	(deg C)	(μS) (mS)	(mg/L)	рН	(mV)	(gallons)	Notes/Observations				
1613	13.34	6.813	2.69	7.52	44.1	1st Bailer	Clear H20				
1016	13.58	4.725	2.29	7.42	40.0	1.0 gal.	Tan Hzo				
1022	13.75	6.688	2.50	7.37	32.3	20 gal					
1025	13.64	6.673	2.28	7.33	27.8	3.0 gal	Ton Hzu				
1030	13.70	6.700	2.56	7.30	25.7	20 gal 3.0 gal 430 gal	Clear N20 Ton H20 Ton H20				
				- ",							
	1										
Analytical	Parameters	Sampled For (i	nclude Mei	thod #):	6	3021 BTEX					
Analytical	T didilictors	Campica i Oi (i	ilciade Mic	mou #j.		DUEL BIEK					
						***************************************	· · · · · · · · · · · · · · · · · · ·				
Dienoeal o	of Durand W:	ater:	En linn	T / /	/ a. m. c	2001					
		ord Complete?		COCH C	ANOF	MACO					
	Laboratory:		AL-								
		g Sampling:	-7/								
		<u> </u>				- W					
Other Note	es/Comment	s									
26:06											
17.28	-										
x 0.1632		7									
1,4329											
λ 3	4.30	gal.									



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

March 27, 2013

Tami Ross Animas Environmental Services 624 East Comanche Farmington, NM 87401

TEL: (505) 793-2072 FAX: (505) 324-2022

RE: Enterprise Lateral 6C OrderNo.: 1303882

Dear Tami Ross:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/21/2013 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. 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. 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.

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order: 1303882

Date Reported: 3/27/2013

1303882

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Enterprise Lateral 6C Project:

1303882-001

Collection Date: 3/20/2013 10:30:00 AM

Lab Order:

Matrix: AQUEOUS Client Sample ID: MW-9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SI	HORT LIST					Analyst: RAA
Benzene	ND	2.0		μg/L	2	3/22/2013 10:39:11 PM
Toluene	ND	2.0		μg/L	2	3/22/2013 10:39:11 PM
Ethylbenzene	ND	2.0		μg/L	2	3/22/2013 10:39:11 PM
Xylenes, Total	ND	4.0		μg/L	2	3/22/2013 10:39:11 PM
Surr: 1,2-Dichloroethane-d4	86.4	70-130		%REC	2	3/22/2013 10:39:11 PM
Surr: 4-Bromofluorobenzene	103	69.5-130		%REC	2	3/22/2013 10:39:11 PM
Surr: Dibromofluoromethane	94.4	70-130		%REC	2	3/22/2013 10:39:11 PM
Surr: Toluene-d8	96.0	70-130		%REC	2	3/22/2013 10:39:11 PM

Lab ID:

Lab ID:

1303882-002

Collection Date: 3/20/2013 11:44:00 AM

Client Sample ID: MW-7 Matrix: AQUEOUS

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SI	HORT LIST				Analyst: RAA
Benzene	ND	2.0	μg/L	2	3/23/2013 12:03:18 AM
Toluene	ND	2.0	μg/L	2	3/23/2013 12:03:18 AM
Ethylbenzene	ND	2.0	μg/L	2	3/23/2013 12:03:18 AM
Xylenes, Total	ND	4.0	μg/L	2	3/23/2013 12:03:18 AM
Surr: 1,2-Dichloroethane-d4	89.9	70-130	%REC	2	3/23/2013 12:03:18 AM
Surr: 4-Bromofluorobenzene	97.8	69.5-130	%REC	2	3/23/2013 12:03:18 AM
Surr: Dibromofluoromethane	93.4	70-130	%REC	2	3/23/2013 12:03:18 AM
Surr: Toluene-d8	94.4	70-130	%REC	2	3/23/2013 12:03:18 AM

Lab ID:

Client Sample ID: MW-8

1303882-003

Collection Date: 3/20/2013 1:04:00 PM

Matrix: AQUEOUS

Analyses	Result	esult RL Qual U		DF	Date Analyzed	
EPA METHOD 8260: VOLATILES SI	HORT LIST				Analyst: RAA	
Benzene	41	2.0	μg/L	2	3/23/2013 12:31:28 AM	
Toluene	36	2.0	μg/L	2	3/23/2013 12:31:28 AM	
Ethylbenzene	ND	2.0	μg/L	2	3/23/2013 12:31:28 AM	
Xylenes, Total	89	4.0	μg/L	2	3/23/2013 12:31:28 AM	
Surr: 1,2-Dichloroethane-d4	92.3	70-130	%REC	2	3/23/2013 12:31:28 AM	
Surr: 4-Bromofluorobenzene	93.7	69.5-130	%REC	2	3/23/2013 12:31:28 AM	
Surr: Dibromofluoromethane	94.8	70-130	%REC	2	3/23/2013 12:31:28 AM	
Surr: Toluene-d8	92.7	70-130	%REC	2	3/23/2013 12:31:28 AM	

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2
- RL Reporting Detection Limit

- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits 1 of 6

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 3/27/2013

1303882

CLIENT: Project:

Animas Environmental Services

Enterprise Lateral 6C

1303882-004

Lab ID:

Client Sample ID: MW-6

Client Sample ID: MW-2

Client Sample ID: MW-3

Collection Date: 3/20/2013 1:29:00 PM

Lab Order:

Matrix: AQUEOUS

Analyses	Result	RL	Qual Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SH	ORT LIST				Analyst: RAA
Benzene	ND	5.0	μg/L	5	3/23/2013 2:51:30 AM
Toluene	ND	5.0	μg/L	5	3/23/2013 2:51:30 AM
Ethylbenzene	120	5.0	μg/L	5	3/23/2013 2:51:30 AM
Xylenes, Total	800	10	μg/L	5	3/23/2013 2:51:30 AM
Surr: 1,2-Dichloroethane-d4	89.2	70-130	%REC	5	3/23/2013 2:51:30 AM
Surr: 4-Bromofluorobenzene	93.0	69.5-130	%REC	5	3/23/2013 2:51:30 AM
Surr: Dibromofluoromethane	93.4	70-130	%REC	5	3/23/2013 2:51:30 AM
Surr: Toluene-d8	95.1	70-130	%REC	5	3/23/2013 2:51:30 AM

Lab ID:

1303882-005

Collection Date: 3/20/2013 1:57:00 PM

Matrix: AQUEOUS

Analyses	Result	RL C	Qual Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SH	ORT LIST				Analyst: RAA
Benzene	ND	5.0	μg/L	5	3/23/2013 4:15:40 AM
Toluene	ND	5.0	μg/L	5	3/23/2013 4:15:40 AM
Ethylbenzene	ND	5.0	μg/L	5	3/23/2013 4:15:40 AM
Xylenes, Total	67	10	μg/L	5	3/23/2013 4:15:40 AM
Surr: 1,2-Dichloroethane-d4	92.4	70-130	%REC	5	3/23/2013 4:15:40 AM
Surr: 4-Bromofluorobenzene	99.5	69.5-130	%REC	5	3/23/2013 4:15:40 AM
Surr: Dibromofluoromethane	100	70-130	%REC	5	3/23/2013 4:15:40 AM
Surr: Toluene-d8	95.3	70-130	%REC	5	3/23/2013 4:15:40 AM

Lab ID:

1303882-006

Collection Date: 3/20/2013 12:21:00 PM

Matrix: AQUEOUS

Analyses	Result	RL	Qual Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SI	HORT LIST				Analyst: RAA
Benzene	ND	2.0	μg/L	2	3/23/2013 12:59:40 AM
Toluene	ND	2.0	μg/L	2	3/23/2013 12:59:40 AM
Ethylbenzene	ND	2.0	μg/L	2	3/23/2013 12:59:40 AM
Xylenes, Total	ND	4.0	μg/L	2	3/23/2013 12:59:40 AM
Surr: 1,2-Dichloroethane-d4	87.1	70-130	%REC	2	3/23/2013 12:59:40 AM
Surr: 4-Bromofluorobenzene	107	69.5-130	%REC	2	3/23/2013 12:59:40 AM
Surr: Dibromofluoromethane	96.4	70-130	%REC	2	3/23/2013 12:59:40 AM
Surr: Toluene-d8	95.8	70-130	%REC	2	3/23/2013 12:59:40 AM

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits 2 of 6

Analytical Report

Lab Order:

Collection Date: 3/20/2013 10:53:00 AM

Lab Order: 1303882

Date Reported: 3/27/2013

1303882

Hall Environmental Analysis Laboratory, Inc.

Enterprise Lateral 6C

1303882-007

CLIENT: Animas Environmental Services

Project:

Lab ID:

Client Sample ID: MW-5 Matrix: AQUEOUS

				-	
Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES S	HORT LIST				Analyst: RAA
Benzene	ND	2.0	μg/L	2	3/23/2013 1:27:32 AM
Toluene	ND	2.0	μg/L	2	3/23/2013 1:27:32 AM
Ethylbenzene	ND	2.0	μg/L	2	3/23/2013 1:27:32 AM
Xylenes, Total	ND	4.0	μg/L	2	3/23/2013 1:27:32 AM
Surr: 1,2-Dichloroethane-d4	88.0	70-130	%REC	2	3/23/2013 1:27:32 AM
Surr: 4-Bromofluorobenzene	104	69.5-130	%REC	2	3/23/2013 1:27:32 AM
Surr: Dibromofluoromethane	95.6	70-130	%REC	2	3/23/2013 1:27:32 AM
Surr: Toluene-d8	98.2	70-130	%REC	2	3/23/2013 1:27:32 AM

Lab ID: 1303882-008 **Collection Date:** 3/20/2013 11:21:00 AM

Client Sample ID: MW-4 Matrix: AQUEOUS

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SI	HORT LIST				Analyst: RAA
Benzene	290	10	μg/L	10	3/25/2013 6:05:03 PM
Toluene	110	2.0	μg/L	2	3/23/2013 1:55:25 AM
Ethylbenzene	ND	2.0	μg/L	2	3/23/2013 1:55:25 AM
Xylenes, Total	15	4.0	μg/L	2	3/23/2013 1:55:25 AM
Surr: 1,2-Dichloroethane-d4	87.2	70-130	%REC	2	3/23/2013 1:55:25 AM
Surr: 4-Bromofluorobenzene	104	69.5-130	%REC	2	3/23/2013 1:55:25 AM
Surr: Dibromofluoromethane	97.1	70-130	%REC	2	3/23/2013 1:55:25 AM
Surr: Toluene-d8	94.3	70-130	%REC	2	3/23/2013 1:55:25 AM

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- Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2 RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits Page 3 of 6

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1303882

27-Mar-13

Client:

Animas Environmental Services

Project:

Enterprise Lateral 6C

Sample ID: b4	SampT	уре: М Е	BLK	Tes	tCode: El	PA Method	8260: Volatile	s Short L	ist	
Client ID: PBW	Batcl	h ID: R9	377	F	RunNo: 9	377				
Prep Date:	Analysis D	Date: 3/	22/2013	8	SeqNo: 2	67674	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: 1,2-Dichloroethane-d4	8.6		10.00		86.4	7 0	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	69.5	130			
Surr: Dibromofluoromethane	9.3		10.00		93.3	70	130			
Surr: Toluene-d8	9.5		10.00		94.6	70	130			
Sample ID: 100ng Ics	SampT	ype: LC	s	Tes	tCode: El	PA Method	8260: Volatile	s Short L	ist	· ·
Client ID: LCSW	Batcl	h ID: R9	377	F	RunNo: 9	377				
Prep Date:	Analysis D	Date: 3/	22/2013	8	SeqNo: 2	67675	Units: µg/L			

Sample ID: 100ng Ics	Samp Type: LCS TestCode: EPA Method 8260: Volatiles Short List									
Client ID: LCSW	Batc	h ID: R9	377	F	RunNo: 9	377				
Prep Date:	Analysis [Date: 3/	22/2013	5	SeqNo: 2	67675	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	98.6	80	120			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.0	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	69.5	130			
Surr: Dibromofluoromethane	9.3		10.00		93.5	70	130			
Surr: Toluene-d8	9.6		10.00		95.7	70	130			

Sample ID: 1303882-001ams	SampT	SampType: MS TestCode: EPA Method 8260: V						s Short L	ist	
Client ID: MW-9	Batch	ID: R9	377	F	RunNo: 9	377				
Prep Date:	Analysis D	ate: 3/	22/2013	8	SeqNo: 2	67686	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	39	2.0	40.00	0	98.7	70	130			
Toluene	39	2.0	40.00	0	96.8	68.5	128			
Surr: 1,2-Dichloroethane-d4	18		20.00		89.7	70	130			
Surr: 4-Bromofluorobenzene	21		20.00		104	69.5	130			
Surr: Dibromofluoromethane	19		20.00		95.0	70	130			
Surr: Toluene-d8	19		20.00		96.8	70	130			

Sample ID: 1303882-001amsd	I SampT	ype: MS	D	Tes	TestCode: EPA Method 8260: Volatiles Short List						
Client ID: MW-9	Batch	ID: R9	377	F	RunNo: 9	377					
Prep Date:	Analysis D	ate: 3/2	22/2013	S	SeqNo: 20	67687	Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	39	2.0	40.00	0	97.5	70	130	1.29	20		
Toluene	37	2.0	40.00	0	93.0	68.5	128	4.04	20		
Surr: 1,2-Dichloroethane-d4	18		20.00		90.5	70	130	0	0		

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Е Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2
- Reporting Detection Limit RL

- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

- Page 4 of 6
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1303882

27-Mar-13

Client:

Animas Environmental Services

Project:

Enterprise Lateral 6C

Sample ID: 1303882-001amsd	SampT	SampType: MSD			TestCode: EPA Method 8260: Volatiles Short List							
Client ID: MW-9	Batch	ID: R9	377	R								
Prep Date:	Analysis D	ate: 3/	22/2013	S	eqNo: 20	67687	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: 4-Bromofluorobenzene	21		20.00		107	69.5	130	0	0			
Surr: Dibromofluoromethane	19		20.00		96.3	70	130	0	0			
Surr: Toluene-d8	19		20.00		96.2	70	130	0	0			

Sample ID: 5ml-rb	SampType: MBLK TestCode: EPA Method 8260: Volatiles Short List									
Client ID: PBW	Batch	ID: R9	399	F	RunNo: 9	399				
Prep Date:	Analysis D	ate: 3/	25/2013	8	SeqNo: 2	68592	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.5	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	69.5	130			
Surr: Dibromofluoromethane	9.9		10.00		99.1	70	130			
Surr: Toluene-d8	9.5		10.00		95.0	70	130			

Sample ID: 100ng Ics	SampT	ype: LC	S	Tes	TestCode: EPA Method 8260: Volatiles Short List							
Client ID: LCSW	Batch	1D: R9	399	F	RunNo: 9	399						
Prep Date:	Analysis D	ate: 3/	25/2013	8	SeqNo: 2	68593	Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	21	1.0	20.00	0	105	70	130					
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.6	70	130					
Surr: 4-Bromofluorobenzene	11		10.00		108	69.5	130					
Surr: Dibromofluoromethane	9.2		10.00		92.3	70	130					
Surr: Toluene-d8	9.5		10.00		94.5	70	130					

Sample ID: 1303961-001a ms	SampT	уре: МS	3	TestCode: EPA Method 8260: Volatiles Short List						
Client ID: BatchQC	Batch	ID: R9	399	F	RunNo: 9	399				
Prep Date:	Analysis D	ate: 3/	25/2013	8	SeqNo: 20	68599	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	400	20	400.0	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	180		200.0		88.2	70	130			
Surr: 4-Bromofluorobenzene	200		200.0		99.4	69.5	130			
Surr: Dibromofluoromethane	180		200.0		91.8	70	130			
Surr: Toluene-d8	180		200.0		92.4	70	130			

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH greater than 2
- RL Reporting Detection Limit

- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded

Spike Recovery outside accepted recovery limits

- ND Not Detected at the Reporting Limit
- RPD outside accepted recovery limits
- Page 5 of 6

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#:

1303882

27-Mar-13

Client:

Animas Environmental Services

Project:

Enterprise Lateral 6C

Sample ID: 1303961-001a m	sd SampT	ype: MS	SD	TestCode: EPA Method 8260: Volatiles Short List						
Client ID: BatchQC	Batch	n ID: R9	399	F	RunNo: 9	399				
Prep Date:	Analysis D	ate: 3/	25/2013	8	SeqNo: 20	68600	Units: µg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	390	20	400.0	0	97.5	70	130	3.46	20	
Surr: 1,2-Dichloroethane-d4	170		200.0		86.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	200		200.0		101	69.5	130	0	0	
Surr: Dibromofluoromethane	180		200.0		92.2	70	130	0	0	
Surr: Toluene-d8	190		200.0		96.1	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- RL Reporting Detection Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

Spike Recovery outside accepted recovery limits

- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

Page 6 of 6



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 No	umber: 1303882		RcptNo: 1	,
Received by/date: MA 03/21/13				
Logged By: Ashley Gallegos 3/21/2013 10:00	:00 AM			
Completed By: Ashley Gallegos 3/21/2013 5:40:1				
00/00/0	2			
Reviewed By: 03/24	10			
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			
<u>Log In</u>				
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 NA	
10.VOA vials have zero headspace?	Yes ✔	No	No VOA Vials	
11, Were any sample containers received broken?	Yes	No 🗸	# of preserved	
40.5			bottles checked	
12.Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes .✔	No	for pH: (<2 or:	12 unless noted)
13. Are matrices correctly identified on Chain of Custody?	Yes 🗸	No :	Adjusted?	,
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	Checked by:	
Special Handling (if applicable)				
16. Was client notified of all discrepancies with this order?	Yes	No	NA 🗸	
Person Notified:	ate:	THE RESERVE THE PROPERTY OF THE PARTY OF THE		
The state of the s	ia: eMail	Phone Fax	In Person	
Regarding:	The Astronomy Street, and an address of the second	A COLUMN TO THE	ATTACA MARANA AND AND A STATE OF A SALES	
Client Instructions:			NO. A MARIE AND A STATE OF THE PARTY OF THE	
17. Additional remarks:				
18. Cooler Information				
Cooler No Temp °C Condition Seal Intact Seal N	lo Seal Date	Signed By		
1 1.0 Good Yes				

MENTAL PRATORY
7109
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or N)
or N)
or N)
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Air Bubbles (Y or N)
analytical report.