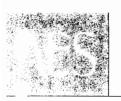
## 3R - 448

**2008 GWMR** 

10/29/2008



### ......................ED

### Animas Environmental Services, LLC 200 CAT 30 PM 3 44

624 E. Comanche . Farmington, NM 87401 . Tel 505-564-2281 . Fax 505-324-2022 . www.animasenvironmental.com

October 29, 2008

Wayne Price Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re: Periodic Progress Report for the Benson-Montin-Greer Highway 537 Llaves Pipeline 2008 Oil Spill, Rio Arriba County, New Mexico

Dear Mr. Price:

Animas Environmental Services, LLC (AES) conducted groundwater sampling of monitoring wells on behalf of Benson-Montin-Greer Drilling Corporation (BMG) at the BMG Highway 537 Llaves Pipeline 2008 Spill Location on September 24, 2008. This sampling was conducted in accordance with recommendations presented in the Site Investigation Report prepared by AES and submitted on June 23, 2008.

The spill originated on the Schmitz Ranch, on the south side of Highway 537, within the NW¼ NE¼ of Section 18, T25N, R3W (latitude and longitude recorded as N36° 24' 214" and W107° 11' 053") and flowed south and southwest through a small unnamed arroyo for a distance of approximately 920 linear feet. A map of the spill investigation area is presented as Figure 2.

#### 1.0 Spill History

On December 31, 2007, a Western Refining truck driver discovered the Llaves pipeline leak and immediately contacted BMG. BMG personnel arrived on-site at about 1630 on the same day and confirmed the leak. BMG shut down the Llaves pipeline pumps and closed a block valve located about one mile upstream. BMG personnel also constructed a small earthen dam across the arroyo to prevent any further surface migration of the oil. BMG contracted with TNT Excavating to remove the oil that had pooled along the surface of the small arroyo. Approximately 40 barrels (bbls) of oil were recovered and placed in storage tanks at the BMG Hwy 537 Transfer Station. A total of 3,932 cubic yards of contaminated soils were excavated and transported to the TNT Landfarm facility for disposal.

On January 9, 2008, the Llaves pipeline was repaired, and AES inspected the site as part of preparation of the Sampling and Analysis Plan, which was submitted to NMOCD on January 23, 2008. BMG notified the National Response Center of the spill on January 23, 2008, and the release was given an identification number of 860429.

#### 2.0 Groundwater Monitoring and Sampling

AES personnel conducted groundwater monitoring and sampling at the project area on September 24, 2008. Groundwater samples were laboratory analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) and total petroleum hydrocarbons (TPH) per EPA Methods 8021/8015 at Hall Environmental Analysis Laboratory (Hall), Albuquerque, New Mexico.

#### 2.1 Groundwater Measurements and Water Quality Data

During the September 2008 sampling event, groundwater measurements and water quality data were recorded for MW-1 through MW-4 and MW-6 through MW-9. Water quality data for MW-5 was not recorded because of a low yield in this well. Groundwater elevations were measured with a Keck water level (with an accuracy to 0.01 foot) and found to range from 29.61 feet below ground surface (bgs) in MW-2 down to 38.16 feet bgs in MW-7.

Water quality measurements were made with a YSI Water Quality Meter. Temperature ranged from 13.70°C in MW-4 to 15.32°C in MW-1, and pH ranged from 6.80 to 7.08. Dissolved oxygen concentrations ranged between 2.75 mg/L in MW-2 and 6.11 mg/L in MW-7; oxidation reduction potential (ORP) ranged from -9.6 mV to 50.3 mV; and conductivity was between 1.464 mS and 3.588 mS. Depth to groundwater measurements and water quality data are summarized and present in Table 1. Water Sample Collection Forms are included as Appendix A.

#### 2.2 Groundwater Analytical Results

Groundwater samples were collected from MW-1 through MW-4 and MW-6 through MW-9 for laboratory analysis. Benzene concentrations were above the applicable New Mexico Water Quality Control Commission (WQCC) standard of 10  $\mu$ g/L in MW-8 (65  $\mu$ g/L) and MW-9 (17  $\mu$ g/L). Benzene concentrations were below laboratory detection limits, and therefore well below applicable New Mexico Water Quality Control Commission (WQCC) standards, for each of the other wells sampled. Toluene, ethylbenzene, and xylene concentrations were below applicable WQCC standards in each of the wells sampled. Gasoline range organics (GRO) concentrations were above the laboratory detection limit in MW-7 (0.069 mg/L), MW-8 (0.90 mg/L), and MW-9 (0.32 mg/L). Diesel and motor oil range organics concentrations were below laboratory detection limits in each of the wells sampled.

Tabulated laboratory analytical results are included in Table 2, and laboratory analytical reports are presented in Appendix B.

#### 3.0 Conclusions and Recommendations

AES recommends remediation of site soils in the vicinity of the excavation via mechanical high vacuum extraction of soil vapors and contaminated groundwater. A corrective action plan (CAP) outlining proposed remedial efforts at the site will be prepared and submitted to NMOCD by December 15, 2008.

If you have any questions about site conditions or this report, please feel free to contact Elizabeth McNally or Ross Kennemer at (505) 564-2281.

Lany Cupps

Project Manager

Ross Kennemer

Environmental Scientist Senior Project Manager

andrea R. Cupps

Elizabeth McNally, P.E.

Attachment:

Figure 1. Topographical Site Location Map

Figure 2. Site Plan with Laboratory Analytical Results
Table 1. Summary of Groundwater Measurement Data
Table 2. Summary of Groundwater Analytical Results

Appendix A. Water Sample Collection Forms
Appendix B. Laboratory Analytical Reports

Cc:

Brandon Powell

New Mexico Oil Conservation Division

1000 Rio Brazos Rd. Aztec, NM 87410

Craig Schmitz #70 CR 405

Lindrith, NM 87029

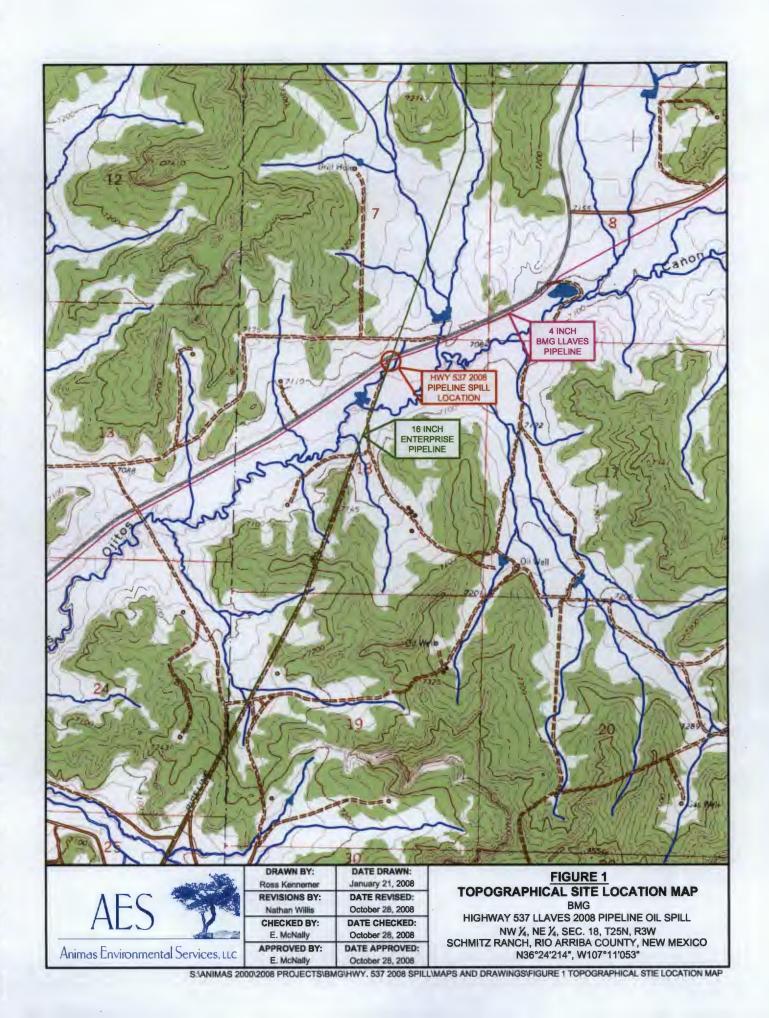
Private Landowner C/O Mike Dimond

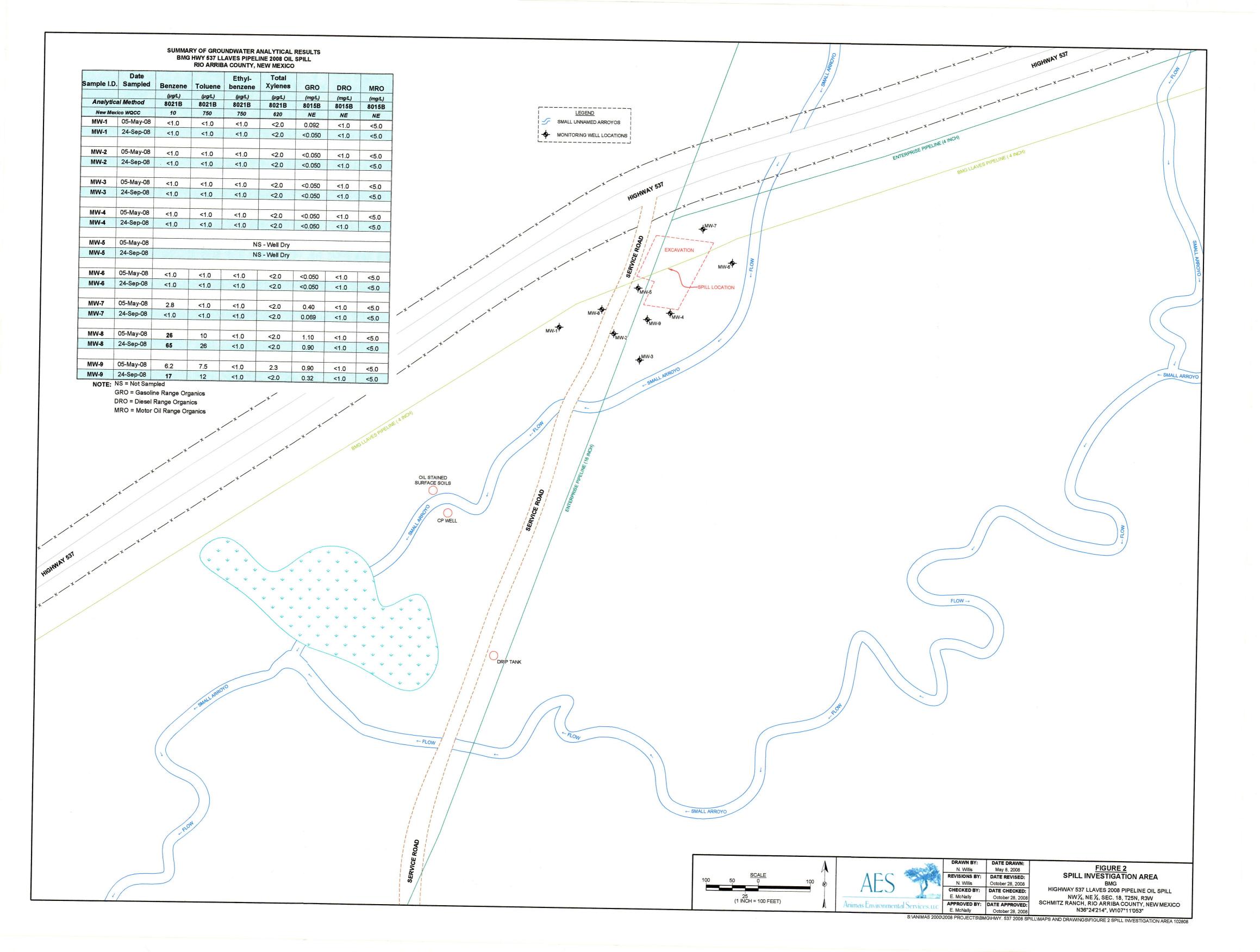
Benson-Montin-Greer Drilling Corp.

Mike Dimond

Benson-Montin-Greer Drilling Corp.

4900 College Blvd Farmington NM 87402





# SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA BMG HWY 537 LLAVES PIPELINE 2008 OIL SPILL TABLE 1

Rio Arriba County, New Mexico

Well ID	Date	Depth to	Surveyed	GW Elev.	•	Conductivity	DO	Temperature	ORP
	Sampled	Water (ft)	10C (#)	(#)	PH	(ms)	(mg/L)	(2)	(AE)
MW-1	05-May-08	31.45	TBS	NA	7.62	4.051	1.48	15.57	141.9
MW-1	24-Sep-08	31.91	TBS	NA	6.80	3.588	2.97	15.32	18.1
MW-2	05-May-08	29.01	TBS	NA	7.59	2.276	2.21	16.43	8.06
MW-2	24-Sep-08	29.61	TBS	NA	6.93	2.073	2.75	14.93	36.0
MW-3	05-May-08	29.49	TBS	AN	7.79	4.083	2.42	15.91	75.7
MW-3	24-Sep-08	30.07	TBS	NA	6.85	2.778	2.80	14.44	18.5
MW-4	05-May-08	32.74	TBS	NA	7.70	2.699	2.36	14.62	-37.5
MW-4	24-Sep-08	33.21	TBS	NA	6.98	2.163	3.04	13.70	42.9
i									
MW-5	05-May-08		TBS	NA			NS - WELL DRY	DRY	
MW-5	24-Sep-08		TBS	NA			NS - WELL DRY	DRY	
MW-6	05-May-08	36.03	TBS	NA	7.73	1.764	2.43	13.95	87.3
MW-6	24-Sep-08	36.44	TBS	NA	7.00	1.464	3.95	14.19	50.3
MW-7	05-May-08	37.71	TBS	NA			NM - LOW YIELD	IELD	
MW-7	24-Sep-08	38.16	TBS	ΝΑ	7.08	1.572	6.11	13.99	36.3
MW-8	05-May-08	33.71	TBS	NA			NM - LOW YIELD	IELD	
MW-8	24-Sep-08	34.20	TBS	NA	6.88	1.672	3.06	15.24	9.6-
									ì
WW-9	05-May-08	31.81	TBS	NA	7.85	1.955	2.59	15.01	-37.9
MW-9	24-Sep-08	32.26	TBS	NA	7.08	1.515	2.84	14.03	43.3

Periodic Progress Report October 29, 2008

# SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA **BMG HWY 537 LLAVES PIPELINE 2008 OIL SPILL TABLE 1**

Rio Arriba County, New Mexico

Vell ID	Date	Depth to	Surveyed	GW Elev.		Conductivity	00	Temperature	ORP	
	Sampled	Water (ft)	TOC (ft)	(ft)	Ηd	(Sm)	(mg/L)	<u>(</u> )	(mV)	

NOTE:

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

#### TABLE 2 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS BMG HWY 537 LLAVES PIPELINE 2008 OIL SPILL

**Rio Arriba County, New Mexico** 

	Date			Ethyl-	Total			
Well ID	Sampled	Benzene	Toluene	benzene	Xylenes	GRO	DRO	MRO
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)	(mg/L)
	al Method	8021B	8021B	8021B	8021B	8015B	8015B	8015B
	co WQCC	10	<i>750</i>	<i>750</i>	620	NE	NE	NE
MW-1	05-May-08	<1.0	<1.0	<1.0	<2.0	0.092	<1.0	<5.0
MW-1	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	05-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	05-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-3	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	05-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	05-May-08			N	S - Well Dry		1	
MW-5	24-Sep-08			N	S - Well Dry			
MW-6	05-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	24-Sep-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-7	05-May-08	2.8	<1.0	<1.0	<2.0	0.40	<1.0	<5.0
MW-7	24-Sep-08	<1.0	<1.0	<1.0	<2.0	0.069	<1.0	<5.0
MW-8	05-May-08	26	10	<1.0	<2.0	1.10	<1.0	<5.0
MW-8	24-Sep-08	65	26	<1.0	<2.0	0.90	<1.0	<5.0
MW-9	05-May-08	6.2	7.5	<1.0	2.3	0.90	<1.0	<5.0
MW-9	24-Sep-08	17	12	<1.0	<2.0	0.32	<1.0	<5.0

NOTE: NS = Not Sampled

GRO = Gasoline Range Organics DRO = Diesel Range Organics MRO = Motor Oil Range Organics

MONITO	RING WE	LL SAMPLIN	G RECO	RD	Anim	as Environmenta	I Services	
Monitor W	ell No:	MW-Ø			624 E.	Comanche, Farmington	NM 87401	
			-		Tel. (50	5) 564-2281 Fax (505)	324-2022	
Location: Project: Sampling Purge Well Di Initial Confirm	Rio Arriba (Groundwate Technician: / No Purge: ameter (in): D.T.W. (ft): D.T.W. (ft):	No Purge 0.75 31,91	Time:	-	Arrival Air O.C. Ele Vell Dep	th (ft): (taken at initial gauging (taken prior to purging	well)	
Final	D.T.W. (ft):		Time:			(taken after sample col	llection)	
	1	Water Quality	Paramete	ers - Rec	orded	During Well Purging	l	
	Temp	Conductivity	DO		ORP	PURGED VOLUME		
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations	
1401	15.37	3.588	2.97	6.80	18.1	116 gallon		
1406						7	Samples collected	
							•	
							- 44	
Analytic	cal Parame	eters (include	analysis ı	method	and nu	mber and type of sa	mple containers)	
		BTEX per EPA I	Method 802	1 (2 40m	L Vials w	/ HCl preserve)		
					`	Vials w/ HCl preserve)		
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	d 8015B	(40mL V	ial w/ no poly)		
	Di	isposal of Purg	ed Water:					
Collect	ed Samples	Stored on Ice	in Cooler: _					
•	Chain of Cu	stody Record (	Complete:					
		Analytical La	boratory:	Hall Envir	ronmenta	al Analysis Laboratory, A	Albuquerque, NM	
Equipment	Used Durin	g Sampling:		Keck Wat	ter Level	, YSI Water Quality Met	er,	
				and New	Disposa	ble Bailer		
Notes/Com	ments					W-1		
				·				
· · · · · · · · · · · · · · · · · · ·								

MONITO	RING WE	LL SAMPLIN	G RECO	RD	Anim	as Environmenta	l Services	
Monitor W	lell No:	MW-7 60	7		624 E. (	Comanche, Farmington	NM 87401	
			_			05) 564-2281 Fax (505)		
		37 Station Spill				ct No.: AES 080101		
•		County, New Me	xico			Date: 9-24-08	-	
		ter Monitoring				Time:	•	
	Technician:		5			Temp: 68'F	-	
_	/ No Purge:				O.C. Ele		-	
1	ameter (in): I D.T.W. (ft):		Time:	_ lotal v   2,2	Nell Dep ' ฉ	τη (π): (taken at initial gauging	r of all walle)	
	D.T.W. (ft):	Z9.61	- Time: Time:	122		_(taken at initial gauging _(taken prior to purging	•	
	D.T.W. (ft):		Time:			_(taken after sample col	•	
	,	Water Quality	Paramete	ers - Red	corded	During Well Purging	I	
	Temp	Conductivity	DO		ORP	PURGED VOLUME		
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations	
1227	14,93	2.073	2.75	6.93	36.0	16 gallon		
123Z							Sound N as collect	
100-					F	,	Samples colleded	
		<b></b>		-				
							<u> </u>	
	<b> </b>							
				<b> </b>				
Analytical Parameters (include analysis method and number and type of sample containers)								
Analytical Parameters (include analysis method and number and type of sample containers)								
		BTEX per EPA	Method 802	21 (2 40m	L Vials w	v/ HCl preserve)		
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	od 8015B	(2 40mL	. Vials w/ HCI preserve)		
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	od 8015B	(40mL V	/ial w/ no poly)		
	Ď	isposal of Purg	ed Water:					
Called		s Stored on Ice						
	•		•					
	Chain of Cu	ustody Record (	Complete:					
		Analytical La	aboratory:	Hall Envi	ronmenta	al Analysis Laboratory, A	Albuquerque, NM	
Equipment	Used Durir	ng Sampling:		Keck Wa	ter Level	l, YSI Water Quality Met	er,	
•				····		ble Bailer		
Notes/Com	monts							
Notes, Com.	mento				~···			

MONITO	RING WEI	LL SAMPLIN	G RECO	RD	Anim	as Environmenta	l Services	
Monitor W	ell No:	MW-6 3			624 E. 0	Comanche, Farmington	NM 87401	
			•		,	5) 564-2281 Fax (505)	324-2022	
		37 Station Spill		_	Proje	ct No.: AES 080101	-	
		County, New Me	xico	_		Date: 9-24-08	=	
		er Monitoring		_		Time: 455	5	
		N. Willis	5			Temp: <u>68°F</u>		
	/ No Purge:			-	O.C. Ele	` '	_	
•	ameter (in):		Time:	<del>-</del>	Vell Dep	ιτη (π): (taken at initial gauging	of all wells)	
	I D.T.W. (ft): D.T.W. (ft):		Time:	115		_(taken at initial yauging _(taken prior to purging	•	
•	D.T.W. (ft):		Time:	120	<u> </u>	_(taken phor to purging _(taken after sample co	•	
			Paramete	ers - Rec	orded	During Well Purging		
	Temp	Conductivity	DO		ORP	PURGED VOLUME		
Time	(deg C)	(μS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations	
1203	14.44	2.778	7.80	6.85	18.5	1/16 gallon		
1208		2.110		0.00		7.0 3-110-1	1 21-1-1-1-1	
1000							Samples Collected	
L								
						1.14.mm		
Analyti	cal Parame	eters (include	analysis	method	and nu	mber and type of sa	mple containers)	
		BTEX per EPA I	Method 802	21 (2 40m	l Vials w	v/ HCl preserve)		
						. Vials w/ HCI preserve)		
		TPH C <sub>6</sub> -C <sub>36</sub> per						
	D	isposal of Purg	ed Water:					
Collect		Stored on Ice	•					
	-	stody Record (	•					
	Chain of Cu	-	•	Hall Envir	ronment	al Analysis Laboratory,	Albuquerque NM	
Equipment	Licod Durin	•	٠.	**************************************				
Equipment	Oseu Duriii	g Sampling:				l, YSI Water Quality Met ble Bailer	.ei,	
Notes/Com	monto			and New	Disposa	Die Dallei		
Notes/Com	ments	· <del></del>			<del> </del>			

MONITO	RING WE	LL SAMPLIN	G RECO	RD	Anim	as Envir <mark>o</mark> nmenta	l Services	
Monitor W	ell No:	MW-# 4			624 E. 0	Comanche, Farmington	NM 87401	
					Tel. (50	5) 564-2281 Fax (505) 3	324-2022	
		37 Station Spill		_	Proje	ct No.: AES 080101	-	
		County, New Me	xico	-		Date: 4-24-08	-	
		er Monitoring		-		Time: 1053	-	
	Technician: / No Purge:		3	- +	Air O.C. Ele	Temp: <u>68°F</u>	_	
	/ No Purge: ameter (in):		· · · · · · · · · · · · · · · · · · ·		Nell Dep		-	
	D.T.W. (ft):		Time:	10131	_	(taken at initial gauging	a of all wells)	
	D.T.W. (ft):		Time:	110		(taken prior to purging	•	
	D.T.W. (ft):		Time:			(taken after sample col	•	
	, ,	Water Quality	Paramete	ers - Red	corded	During Well Purging		
	Temp	Conductivity	DO		ORP	PURGED VOLUME		
Time	(deg C)	(µS) (mS)	(mg/L)	рH	(mV)	(see reverse for calc.)	Notes/Observations	
110Z	13,70	2,163	3.04	6.98	42.9	1/16 gallon		
1107							Samples collected	
110					<u> </u>		- supples	
					-			
Analytical Parameters (include analysis method and number and type of sample containers)								
				-			,	
		BTEX per EPA I				Vials w/ HCl preserve)		
					•			
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	00 80 158	(40ML V	riai w/ no poly)		
	D	isposal of Purg	ed Water:					
Collect	ed Samples	Stored on Ice	in Cooler:					
	Chain of Cเ	ıstody Record (	Complete:					
		Analytical La	boratory:	Hall Envi	ronment	al Analysis Laboratory, A	Albuquerque, NM	
Equipment	Used Durin	g Sampling:		Keck Wa	ter Level	, YSI Water Quality Met	er,	
				and New	Disposa	ble Bailer		
Notes/Com	ments							

MONITO	RING WE	LL SAMPLIN	G RECO	RD	Anim	as Environmenta	al Services	
Monitor W	ell No:	MW- <b>4</b> ≤			624 E. (	Comanche, Farmington	NM 87401	
			•		Tel. (50	5) 564-2281 Fax (505)	324-2022	
Site:	Highway 53	37 Station Spill			Proje	ct No.: AES 080101		
		County, New Me	xico	_		Date: 9-24-08	_	
		er Monitoring		- -		Time: 1312	_	
	Technician:		5			Temp: 72°F	_	
	/ No Purge:			_	.O.C. Ele	` '	_	
Well Di	ameter (in):	2	T:	_	Nell Dep -		- 	
Confirm	D.T.W. (ft): D.T.W. (ft):	Dry	Time:	1316	<u> </u>	(taken at initial gauging (taken prior to purging	•	
	D.T.W. (ft):		Time:			_(taken phor to purging (taken after sample co	•	
		Water Quality		ers - Red	corded	During Well Purging	· · · · · · · · · · · · · · · · · · ·	
	Temp	Conductivity	DO		ORP	PURGED VOLUME	, 	
	1						N. 4 - 101 11	
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)	(see reverse for calc.)	Notes/Observations	
	/						2	
						· /	1	
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			1	\				
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	\ \						,	
	1 1		/			, /		
	V							
					•			
						/		
Analyti	cal Parame	eters (include	analysis	method	and nu	mber and type of sa	imple containers)	
		BTEX per EPA	Method 802	21 (2 40m	l Vials w	// HCI preserve)		
	-					. Vials w/ HCl preserve)		
		TPH C <sub>6</sub> -C <sub>36</sub> per						
	D	isposal of Purg	ed Water:					
Collect		Stored on Ice	•					
	-	stody Record (	•					
			•	Hall Envi	ronmenta	al Analysis Laboratory,	Albuquerque, NM	
Equipment	Used Durin	g Sampling:				, YSI Water Quality Me		
		-				ble Bailer		
Notes/Com	ments			*****	. 9.			
				-				

MONITO	RING WE	LL SAMPLIN	G RECO	RD	Anima	as Environmenta	l Services		
Monitor W	ell No:	MW-9 6			624 E. 0	Comanche, Farmington	NM 87401		
			•			5) 564-2281 Fax (505)	324-2022		
		37 Station Spill			Proje	ct No.: AES 080101			
		County, New Me	xico	_		Date: 9-24-08			
•		er Monitoring		-	Arrival				
	Technician: / No Purge:			- т	Air O.C. Ele	Temp: <u>65°F</u>			
	ameter (in):				Vell Dep				
	D.T.W. (ft):	36,44	Time:	- 10Z		(taken at initial gauging	g of all wells)		
	D.T.W. (ft):		Time:	1021		(taken prior to purging			
	D.T.W. (ft):		Time:			(taken after sample col	lection)		
		Water Quality	Paramete	ers - Rec	orded	During Well Purging	ı		
	Temp	Conductivity	DO		ORP	PURGED VOLUME			
Time	(deg C)	(μS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations		
10924						Ho goton			
1034	14.19	1.464	3.95	7.00	50,3	VIL gallon			
1040	,					<u> </u>	samples collected		
10									
							, ,		
Analuti	and Darama	otoro (includo	analysis	mothod	and nu	mbor and type of sa	mple containers)		
Analytical Parameters (include analysis method and number and type of sample containers)									
			7,4164			// HCl preserve)			
		0 00 .				Vials w/ HCl preserve)	, , , , , , , , , , , , , , , , , , ,		
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	od 8015B	(40mL V	/ial w/ no poly)			
	D	isposal of Purg	jed Water:						
Collect	ted Samples	s Stored on Ice	in Cooler:						
	Chain of Cu	ustody Record (	Complete:						
		Analytical L	aboratory:	Hall Envi	ronment	al Analysis Laboratory,	Albuquerque, NM		
Equipment	Used Durir	ng Sampling:	•			I, YSI Water Quality Met			
						ble Bailer			
Notes/Com	ments				<u>-</u>				
110100,0011				7.00					
-									

MONITO	RING WE	LL SAMPLIN	G RECO	RD	Anim	as Environmenta	l Services		
Monitor W	ell No:	MW- <b>∮</b> →			624 E. 0	Comanche, Farmington	NM 87401		
			-		Tel. (50	5) 564-2281 Fax (505)	324-2022		
		37 Station Spill			Proje	ct No.: AES 080101	_		
		County, New Me	xico	_		Date: 9-24-08	_		
_		er Monitoring		-		Time: <u>09:38</u>	-		
	Гесhnician: / No Purge:			- т		Temp: <u>63° F</u> ev. (ft):	-		
_	ameter (in):				Vell Dep		-		
		38,16	Time:	0943	-	(taken at initial gauging	g of all wells)		
	D.T.W. (ft):		Time:	0947	<u>t</u>	(taken prior to purging	•		
Final	D.T.W. (ft):		Time:			(taken after sample col	llection)		
		Water Quality	Paramete	ers - Rec	orded	During Well Purging	l		
	Temp	Conductivity	DO		ORP	PURGED VOLUME			
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations		
954	1399	1,57z	6.11	7.08	36.3	1/16 gallon			
1000		71.0 7	<i>G</i> , , ,	.,			Samples Collecter		
200							SCALDIES EDIRCIE		
	-				·				
A l4!	a a I. Dawawa					mbar and turn of an			
Anaiyti	cai Param	gers (include	anaiysis	metnoa	and nu	mber and type of sa	mple containers)		
		BTEX per EPA	Method 802	21 (2 40m	L Vials w	// HCl preserve)			
						Vials w/ HCl preserve)			
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	od 8015B	(40mL V	'ial w/ no poly)			
	D	isposal of Purg	jed Water:						
Collect	ed Samples	Stored on Ice	in Cooler:						
!	Chain of Cเ	stody Record	Complete:						
		Analytical La	aboratory:	Hall Envi	ronment	al Analysis Laboratory,	Albuquerque, NM		
Equipment	Used Durir	g Sampling:		Keck Wa	ter Level	l, YSI Water Quality Met	ter,		
				and New	Disposa	ble Bailer			
Notes/Com	ments	<u> </u>							
····									
						**************************************			
	<del>, , , , , , , , , , , , , , , , , , , </del>								

MONITO	RING WE	LL SAMPLIN	G RECO	RD	Anim	as Environmenta	l Services	
Monitor W	ell No:	<b>MW-</b> 8			624 E.	Comanche, Farmington	NM 87401	
						5) 564-2281 Fax (505)	324-2022	
		37 Station Spill		_	Proje	ct No.: AES 080101	-	
		County, New Me	xico	-	A	Date: 9-24-08	-	
	Technician:	er Monitoring		-		Time:   13 Z Z	<b>-</b> .	
	/ No Purge:			- т	O.C. Ele		-	
_	ameter (in):		177.1.		Nell Dep		-	
	D.T.W. (ft):		Time:	132	_	(taken at initial gauging	g of all wells)	
	D.T.W. (ft):		Time:	132		(taken prior to purging	•	
Final	D.T.W. (ft):		Time:			(taken after sample co	llection)	
	1	Water Quality	Paramete	ers - Red	corded	During Well Purging	J	
	Temp	Conductivity	DO		ORP	PURGED VOLUME		
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations	
1331	15.24	1.672	3.06	6.88	-9.6	1/16 gallon		
1336							Sandes collected	
			V7177642 1				· · · · · · · · · · · · · · · · · · ·	
Analyti	cal Parame	eters (include	analysis	method	and nu	mber and type of sa	mple containers)	
		BTEX per EPA I	Method 802	21 (2 40m	L Vials w	// HCl preserve)		
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	od 8015B	(2 40mL	Vials w/ HCl preserve)		
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	od 8015B	(40mL V	'ial w/ no poly)		
	D	isposal of Purg	ed Water:					
Collect	ted Samples	Stored on Ice	in Cooler:					
	Chain of Cu	stody Record (	Complete:					
		Analytical La	aboratory:	Hall Envi	ronmenta	al Analysis Laboratory,	Albuquerque, NM	
Equipment	Used Durin	g Sampling:	•	Keck Wa	ter Level	, YSI Water Quality Met	er,	
		_		and New	Disposa	ble Bailer		
Notes/Com	ments							

MONITO	RING WE	LL SAMPLIN	G RECO	RD	Anim	as Environmenta	l Services
Monitor W	eli No:	MW- <b>5</b> 9			624 E. 0	Comanche, Farmington	NM 87401
i			•		Tel. (50	5) 564-2281 Fax (505)	324-2022
Site:	Highway 53	37 Station Spill			Proje	ct No.: AES 080101	_
		County, New Me	xico	_		Date: 9-24-08	_
		er Monitoring		_	Arrival		-
	Technician:		1i-5			Temp: 71°F	_
	/ No Purge:			-	O.C. Ele	` '	_
L.	ameter (in):		<del></del>	-	Nell Dep ∽		
	D.T.W. (ft):		Time:	124		(taken at initial gauging	•
	D.T.W. (ft): D.T.W. (ft):		Time:	123	, Z	_(taken prior to purging _(taken after sample co	*
				Do		- ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	
		<u> </u>		ers - Rec		During Well Purging PURGED VOLUME	<u> </u>
	Temp	Conductivity	DO		ORP		
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)		Notes/Observations
1254	14.03	1.515	Z.84	7.08	43.3	16 gallon	
1300						9	Samples collected
							pi o mineral
						· · · · · · · · · · · · · · · · · · ·	
<u> </u>							
							M
Analuti	aal Barana	otovo (in olivelo	i			mbar and time of an	mente containers)
Anaiyti	cai Parame	eters (include	anaiysis	metnoa	and nu	mber and type of sa	mpie containers)
		BTEX per EPA	Method 802	21 (2 40m	L Vials w	// HCl preserve)	1967
						Vials w/ HCl preserve)	
		TPH C <sub>6</sub> -C <sub>36</sub> per	EPA Metho	od 8015B	(40mL V	'ial w/ no poly)	
	D	isposal of Purg	ed Water:				
Collect	ed Samples	Stored on Ice	in Cooler:				
	Chain of Cu	stody Record (	Complete:				
		Analytical La	aboratory:	Hall Envi	ronmenta	al Analysis Laboratory,	Albuquerque, NM
Equipment	Used Durin	g Sampling:		Keck Wa	ter Level	, YSI Water Quality Met	er,
						ble Bailer	
Notes/Com	ments						
				·			
-							



#### **COVER LETTER**

Monday, October 06, 2008

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

TEL: (505) 564-2281 FAX (505) 324-2022

RE: BMG Highway 537 2008 Spill

Dear Ross Kennemer:

Order No.: 0809525

Hall Environmental Analysis Laboratory, Inc. received 9 sample(s) on 9/26/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001 Texas Lab# T104704424-08-TX



Date: 06-Oct-08

**CLIENT:** 

Animas Environmental Services

Lab Order:

0809525

Project:

BMG Highway 537 2008 Spill

Lab ID:

0809525-01

Client Sample ID: MW-1

Collection Date: 9/24/2008 2:06:00 PM

**Date Received:** 9/26/2008

Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE					Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	10/2/2008
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	10/2/2008
Surr: DNOP	127	58-140	%REC	1	10/2/2008
EPA METHOD 8015B: GASOLINE RAN	iGE				Analyst: DAM
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	10/2/2008 10:49:18 PM
Surr: BFB	91.5	59.9-122	%REC	1	10/2/2008 10:49:18 PM
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	ND	1.0	μ <b>g/L</b>	1	10/2/2008 10:49:18 PM
Toluene	ND	1.0	μg/L	1	10/2/2008 10:49:18 PM
Ethylbenzene	ND	1.0	μg/L	1	10/2/2008 10:49:18 PM
Xylenes, Total	ND	2.0	μg/L	1	10/2/2008 10:49:18 PM
Surr: 4-Bromofluorobenzene	93.4	65.9-130	%REC	1	10/2/2008 10:49:18 PM

Value exceeds Maximum Contaminant Level

Spike recovery outside accented recovery limits

- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
  - RL Reporting Limit

Date: 06-Oct-08

**CLIENT:** 

Animas Environmental Services

Lab Order:

0809525

BMG Highway 537 2008 Spill

Project: Lab ID:

0809525-02

Client Sample ID: MW-2

Collection Date: 9/24/2008 12:32:00 PM

Date Received: 9/26/2008

Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE					Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	10/2/2008
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	10/2/2008
Surr: DNOP	129	58-140	%REC	1	10/2/2008
EPA METHOD 8015B: GASOLINE RAI	NGE				Analyst: DAM
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	10/2/2008 11:19:46 PM
Surr: BFB	89.5	59.9-122	%REC	1	10/2/2008 11:19:46 PM
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	ND	1.0	μg/L	1	10/2/2008 11:19:46 PM
Toluene	ND	1.0	μg/L	1	10/2/2008 11:19:46 PM
Ethylbenzene	ND	1.0	μg/L	1	10/2/2008 11:19:46 PM
Xylenes, Total	ND	2.0	μg/L	1	10/2/2008 11:19:46 PM
Surr: 4-Bromofluorobenzene	88.9	65.9-130	%REC	1	10/2/2008 11:19:46 PM

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits

Spike recovery outside accepted recovery limits

- ND Not Detected at the Reporting Limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
  - RL Reporting Limit

Date: 06-Oct-08

**CLIENT:** 

Animas Environmental Services

Lab Order:

0809525

Project:

BMG Highway 537 2008 Spill

Lab ID:

0809525-03

Client Sample ID: MW-3

Collection Date: 9/24/2008 12:08:00 PM

Date Received: 9/26/2008

Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE					Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	10/2/2008
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	10/2/2008
Surr: DNOP	129	58-140	%REC	1	10/2/2008
EPA METHOD 8015B: GASOLINE RAN	NGE				Analyst: DAM
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	10/2/2008 11:50:10 PM
Surr: BFB	85.9	59.9-122	%REC	1	10/2/2008 11:50:10 PM
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	ND	1.0	μg/L	1	10/2/2008 11:50:10 PM
Toluene	ND	1.0	μg/L	1	10/2/2008 11:50:10 PM
Ethylbenzene	ND	1.0	μg/L	1	10/2/2008 11:50:10 PM
Xylenes, Total	ND	2.0	μg/L	1	10/2/2008 11:50:10 PM
Surr: 4-Bromofluorobenzene	83.3	65.9-130	%REC	1	10/2/2008 11:50:10 PM

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
  - RL Reporting Limit

Page 3 of 9

Date: 06-Oct-08

**CLIENT:** 

Animas Environmental Services

Lab Order:

0809525

0809525-04

Client Sample ID: MW-4

Collection Date: 9/24/2008 11:07:00 AM

Project: Lab ID: BMG Highway 537 2008 Spill

Date Received: 9/26/2008

Matrive

Matrix: AQUEOUS

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E				Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	10/2/2008
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	10/2/2008
Surr: DNOP	127	58-140	%REC	1	10/2/2008
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: DAM
Gasoline Range Organics (GRO)	ND	0.050	mg/L	1	10/3/2008 12:20:41 AM
Surr: BFB	89.0	59.9-122	%REC	1	10/3/2008 12:20:41 AM
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	ND	1.0	μg/L	1	10/3/2008 12:20:41 AM
Toluene	ND	. 1.0	μg/L	1	10/3/2008 12:20:41 AM
Ethylbenzene	ND	1.0	μg/L	1	10/3/2008 12:20:41 AM
Xylenes, Total	ND	2.0	μg/L	1	10/3/2008 12:20:41 AM
Surr: 4-Bromofluorobenzene	89.0	65.9-130	%REC	1	10/3/2008 12:20:41 AM

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits

Spike recovery outside accepted recovery limits

ND Not Detected at the Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
  - RL Reporting Limit

Date: 06-Oct-08

CLIENT:

Animas Environmental Services

Lab Order:

0809525

Project:

BMG Highway 537 2008 Spill

Lab ID:

0809525-05

Client Sample ID: MW-6

Collection Date: 9/24/2008 10:40:00 AM

Date Received: 9/26/2008

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE	<u> </u>					Analyst: SCC
Diesel Range Organics (DRO)	. ND	1.0	г	mg/L	1,	10/2/2008
Motor Oil Range Organics (MRO)	ND	5.0	г	mg/L	1	10/2/2008
Surr: DNOP	122	58-140	q	%REC	1	10/2/2008
EPA METHOD 8015B: GASOLINE RAI	NGE					Analyst: DAM
Gasoline Range Organics (GRO)	ND	0.050	г	mg/L	1	10/3/2008 12:51:02 AM
Surr: BFB	88.3	59.9-122	9	%REC	1	10/3/2008 12:51:02 AM
EPA METHOD 8021B: VOLATILES						Analyst: DAM
Benzene	ND	1.0	1	ıg/L	1	10/3/2008 12:51:02 AM
Toluene	ND	1.0	Ļ	ıg/L	1	10/3/2008 12:51:02 AM
Ethylbenzene	ND	1.0	ŀ	ıg/L	.1	10/3/2008 12:51:02 AM
Xylenes, Total	ND	2.0	ļ	ıg/L	1	10/3/2008 12:51:02 AM
Surr: 4-Bromofluorobenzene	87.9	65.9-130	9	%REC	1	10/3/2008 12:51:02 AM

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- Analyte detected below quantitation limits J

Snike recovery outside accented recov

- Not Detected at the Reporting Limit
- Analyte detected in the associated Method Blank
- Н Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
  - RL Reporting Limit

Date: 06-Oct-08

CLIENT:

Animas Environmental Services

Lab Order:

0809525

BMG Highway 537 2008 Spill

Project: Lab ID:

0809525-06

Client Sample ID: MW-7

Collection Date: 9/24/2008 10:00:00 AM

Date Received: 9/26/2008

Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	GE .				Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	10/2/2008
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	10/2/2008
Surr: DNOP	119	58-140	%REC	1	10/2/2008
EPA METHOD 8015B: GASOLINE RA	ANGE				Analyst: <b>DAM</b>
Gasoline Range Organics (GRO)	0.069	0.050	mg/L	1	10/3/2008 1:21:26 AM
Surr: BFB	89.7	59.9-122	%REC	1	10/3/2008 1:21:26 AM
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	ND	1.0	μg/L	1	10/3/2008 1:21:26 AM
Toluene	ND	1.0	μg/L	1	10/3/2008 1:21:26 AM
Ethylbenzene	ND	1.0	μg/L	1	10/3/2008 1:21:26 AM
Xylenes, Total	ND	2.0	μg/L	1	10/3/2008 1:21:26 AM
Surr: 4-Bromofluorobenzene	89.5	65.9-130	%REC	1	10/3/2008 1:21:26 AM

- Value exceeds Maximum Contaminant Level
- Ε Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

Spike recovery outside accepted recovery limits

- RL Reporting Limit

 $\mathbf{B}$ 

Н

MCL Maximum Contaminant Level

Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

Date: 06-Oct-08

**CLIENT:** 

Animas Environmental Services

Lab Order:

0809525

Project:

BMG Highway 537 2008 Spill

Lab ID:

0809525-07

Client Sample ID: MW-8

Collection Date: 9/24/2008 1:36:00 PM

Date Received: 9/26/2008

Matrix: AQUEOUS

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	Ε				Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0	mg/L	ĺ	10/2/2008
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	10/2/2008
Surr: DNOP	128	58-140	%REC	1	10/2/2008
EPA METHOD 8015B: GASOLINE RA	NGE				Analyst: DAM
Gasoline Range Organics (GRO)	0.90	0.050	mg/L	1	10/3/2008 1:51:47 AM
Surr: BFB	87.0	59.9-122	%REC	1	10/3/2008 1:51:47 AM
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	65	1.0	µg/L	1	10/3/2008 1:51:47 AM
Toluene	26	1.0	μ <b>g/L</b>	1	10/3/2008 1:51:47 AM
Ethylbenzene	ND	1.0	μg/L	1	10/3/2008 1:51:47 AM
Xylenes, Total	ND	2.0	μg/L	1	10/3/2008 1:51:47 AM
Surr: 4-Bromofluorobenzene	88.4	65.9-130	%REC	1	10/3/2008 1:51:47 AM

- Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
  - RL Reporting Limit

Date: 06-Oct-08

**CLIENT:** 

Animas Environmental Services

Lab Order:

0809525

BMG Highway 537 2008 Spill

Project: Lab ID:

0809525-08

Client Sample ID: MW-9

Collection Date: 9/24/2008 1:00:00 PM

Date Received: 9/26/2008

Matrix: AQUEOUS

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE					Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0	mg/L	1	10/2/2008
Motor Oil Range Organics (MRO)	ND	5.0	mg/L	1	10/2/2008
Surr: DNOP	126	58-140	%REC	1	10/2/2008
EPA METHOD 8015B: GASOLINE RAI	NGE				Analyst: DAM
Gasoline Range Organics (GRO)	0.32	0.050	mg/L	1	10/3/2008 2:22:04 AM
Surr: BFB	87.0	59.9-122	%REC	1	10/3/2008 2:22:04 AM
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	17	1.0	μg/L	1	10/3/2008 2:22:04 AM
Toluene	12	1.0	μg/L	1	10/3/2008 2:22:04 AM
Ethylbenzene	ND	1.0	μg/L	1	10/3/2008 2:22:04 AM
Xylenes, Total	ND	2.0	μg/L	1	10/3/2008 2:22:04 AM
Surr: 4-Bromofluorobenzene	86.6	65.9-130	%REC	1	10/3/2008 2:22:04 AM

Value exceeds Maximum Contaminant Level

Spike recovery outside accepted recovery limits

- Е Value above quantitation range
- Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

- Analyte detected in the associated Method Blank
- Η Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
  - RL Reporting Limit

Date: 06-Oct-08

CLIENT:

Animas Environmental Services

Client Sample ID: TRIP BLANK

Lab Order:

0809525

**Collection Date:** 

Project:

BMG Highway 537 2008 Spill

Date Received: 9/26/2008

Lab ID:

0809525-09

Matrix: TRIP BLANK

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: DAM
Benzene	ND	1.0	μg/L	1	10/3/2008 2:52:25 AM
Toluene	ND	1.0	μg/L	1	10/3/2008 2:52:25 AM
Ethylbenzene	ND	1.0	μg/L	1	10/3/2008 2:52:25 AM
Xylenes, Total	ND	2.0	μg/L	1	10/3/2008 2:52:25 AM
Surr: 4-Bromofluorobenzene	91.3	65.9-130	%REC	1	10/3/2008 2:52:25 AM

Value exceeds Maximum Contaminant Level

Snike recovery outside accepted recovery limits

- E Value above quantitation range
- Analyte detected below quantitation limits
- Not Detected at the Reporting Limit

- Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Η
- MCL Maximum Contaminant Level
  - RL Reporting Limit

**Date:** 06-Oct-08

#### **QA/QC SUMMARY REPORT**

Client:

Animas Environmental Services

Project: BMG Highway 537 2008 Spill

Work Order:

0809525

Project: BMG Highw	ay 537 20	08 Spili					Woi	rk Order: 0809525
Analyte	Result	Units	PQL	%Rec	LowLimit H	HighLimit	%RPD R	PDLimit Qual
Method: EPA Method 8015B: D	iesel Range				D-4-h ID	47000	Analysis Data	40/0/2008
Sample ID: MB-17226		MBLK			Batch ID	17226	Analysis Date:	10/2/2008
Diesel Range Organics (DRO)	ND	mg/L	1.0					
Motor Oil Range Organics (MRO)	ND	mg/L	5.0					10/0/000
Sample ID: LCS-17226		LCS			Batch ID	17226	Analysis Date:	10/2/2008
Diesel Range Organics (DRO)	5.264	mg/L	1.0	105	74	157		
Motor Oil Range Organics (MRO)	ND	mg/L	5.0					
Sample ID: LCSD-17226		LCSD			Batch ID	17226	Analysis Date:	10/2/2008
Diesel Range Organics (DRO)	5.982	mg/L	1.0	120	74	157		
Motor Oil Range Organics (MRO)	ND	mg/L	5.0			·		
Method: EPA Method 8015B: G	asoline Ran	ge						
Sample ID: 0809525-02A MSD		MSD			Batch ID	R30493	Analysis Date:	10/2/2008 2:37:23 PM
Gasoline Range Organics (GRO)	0.4994	mg/L	0.050	99.9	80	115	0.320	8.39
Sample ID: 5ML RB		MBLK			Batch ID	R30493	Analysis Date:	10/2/2008 9:02:21 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050					
Sample ID: 2.5UG GRO LCS		LCS			Batch ID:	R30493	Analysis Date:	10/2/2008 1:05:53 PM
Gasoline Range Organics (GRO)	0.4920	mg/L	0.050	98.4	80	115	•	
Sample ID: 0809525-02A MS	0.4320	MS	0.000	30.4	Batch ID:		Analysis Date:	10/2/2008 2:06:51 PM
Gasoline Range Organics (GRO)	0.5010	mg/L	0.050	100	80	115	Analysis Date.	10/2/2000 2:00:011 10
Method: EPA Method 8021B: Vo Sample ID: 0809525-02A MSD	olatiles	MSD			Batch ID:	R30493	Analysis Date:	10/2/2008 2:37:23 PM
Benzene	6.518	μg/L	1.0	116	85.9	113	2.22	27 S
Toluene	44.13		1.0	110	86.4	113	1.26	19
Ethylbenzene	9.102	μg/L	1.0	114	83.5	_	2.17	10
Xylenes, Total	53.07	μg/L	2.0	115	83.4	118 122	1.79	13
Sample ID: 5ML RB	55.07	µg/L <i>MBLK</i>	2.0	115	Batch ID:		Analysis Date:	
·					Batch ID.	K30493	Allalysis Date.	10/2/2006 9.02.21 AW
Benzene	ND	μg/L "	1.0					
Toluene	ND	μg/L	1.0					
Ethylbenzene Yylenes Total	ND	μg/L	1.0					
Xylenes, Total	ND	μg/L	2.0		D-4-b ID.	D00400	At-sis Data	40/0/0000 4:00:40 584
Sample ID: 100NG BTEX LCS		LCS			Batch ID:		Analysis Date:	10/2/2008 1:36:19 PM
Benzene	19.72	μg/L	1.0	98.6	85.9	113		
Toluene	19.68	μg/L "	1.0	98.4	86.4	113		
Ethylbenzene Yylanan Tatal	20.35	μg/L	1.0	102	83.5	118		
Xylenes, Total	60.30	µg/L	2.0	101		122		10/0/0000 0 00 5/ 5-1
Sample ID: 0809525-02A MS		MS			Batch ID:		Analysis Date:	
Benzene	6.664	µg/L	1.0	119		113		S
Toluene	44.69	μg/L	1.0	112		113		
Ethylbenzene	9.302	µg/L	1.0	116		118		
Xylenes, Total	54.03	μg/L	2.0	117	83.4	122		

#### Qualifiers:

- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

E Value above quantitation range

#### Sample Receipt Checklist Client Name ANIMAS ENVIRONMENTAL Date Received: 9/26/2008 Work Order Number 0809525 Received by: ARS ample ID labels checked by: Checklist completed by: Matrix: Carrier name Greyhound No 🗌 Not Present Yes 🗸 Shipping container/cooler in good condition? No 🗌 Not Present Not Shipped Custody seals intact on shipping container/cooler? No 🗌 **V** N/A Custody seals intact on sample bottles? Yes 🗹 No 🗌 Chain of custody present? No 🗌 Chain of custody signed when relinquished and received? Chain of custody agrees with sample labels? Yes 🗸 No 🗌 Samples in proper container/bottle? Yes 🗸 No 🗌 Sample containers intact? No 🗌 Yes 🗸 Sufficient sample volume for indicated test? No 🗀 Yes 🗸 All samples received within holding time? Yes 🗸 No VOA vials submitted No 🗌 Water - VOA vials have zero headspace? No 🗌 N/A Water - Preservation labels on bottle and cap match? Yes 🗌 No 🗌 N/A Water - pH acceptable upon receipt? <6° C Acceptable Container/Temp Blank temperature? 3° If given sufficient time to cool. COMMENTS: Client contacted Date contacted: Person contacted Contacted by: Regarding: upon arrival sample 0809525-4 al 9/26 Comments: Corrective Action

Chain-of-Custody Record   Turn-Around Time:   Chain and   Turn-Around Time:   Chain and   Turn-Around Time:   Colored Name:											-	+			1						Pir Bubbles	то Y)	(N							_	
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